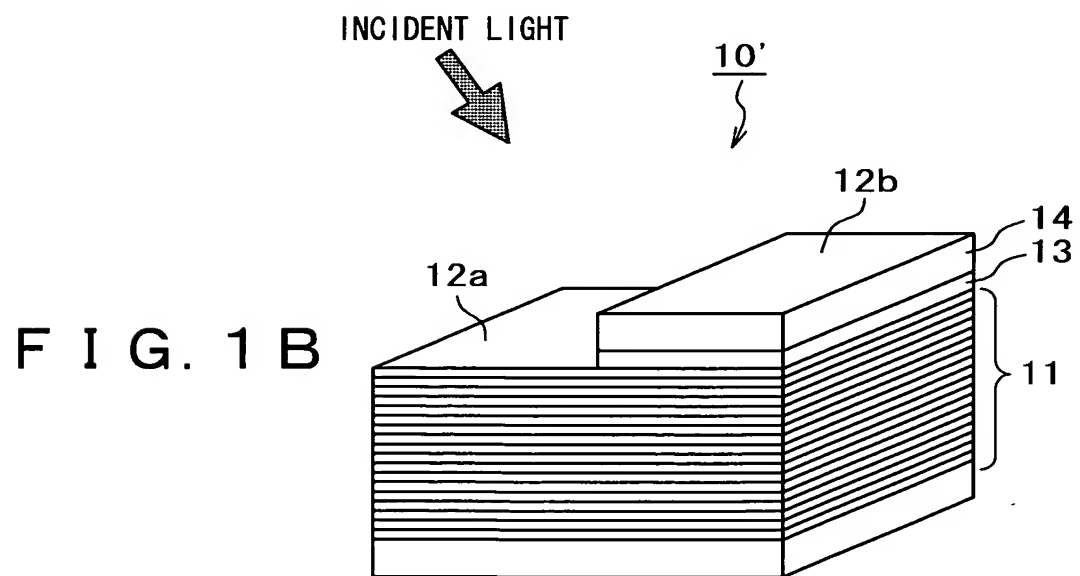
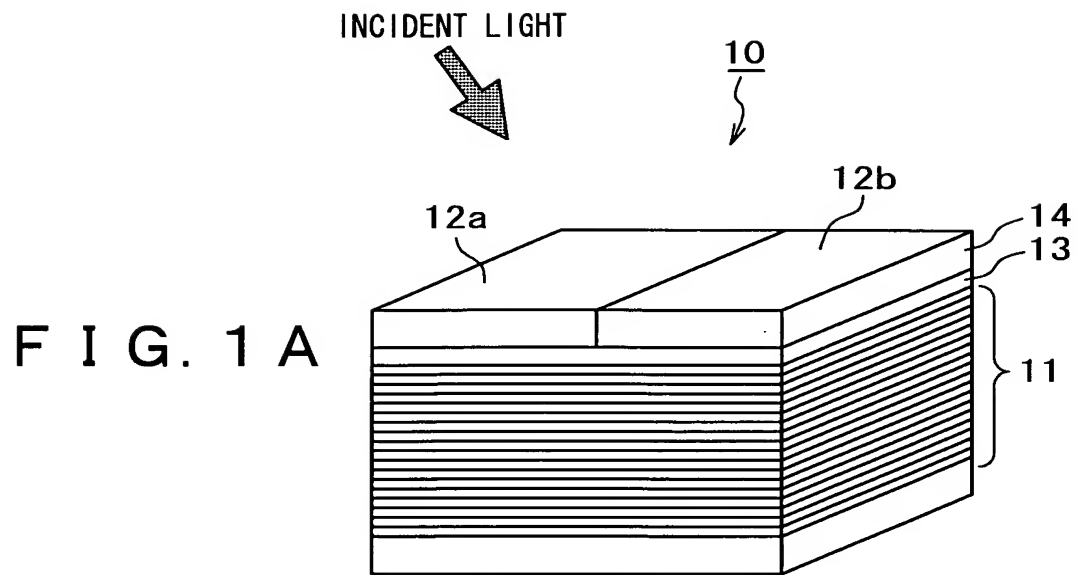
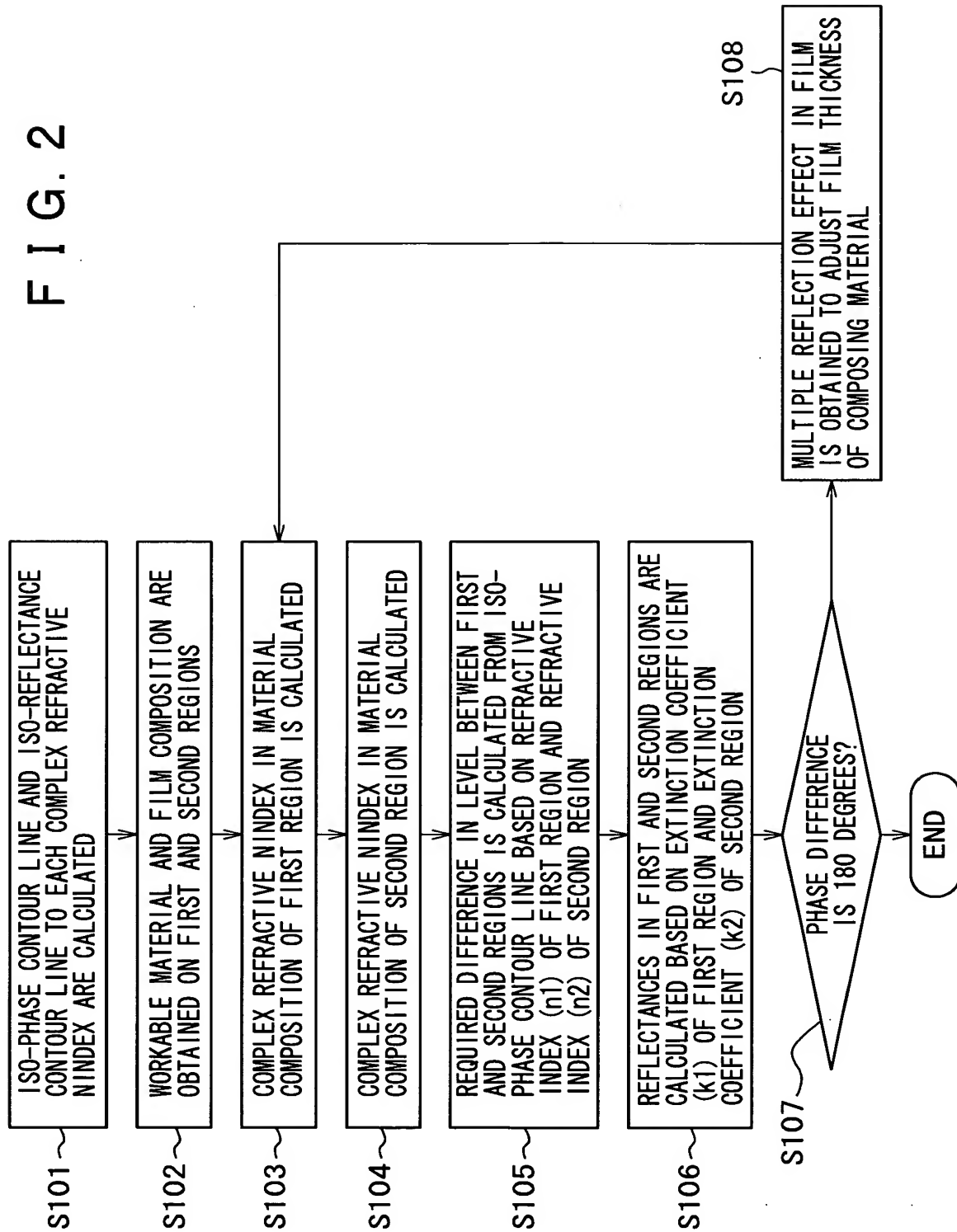


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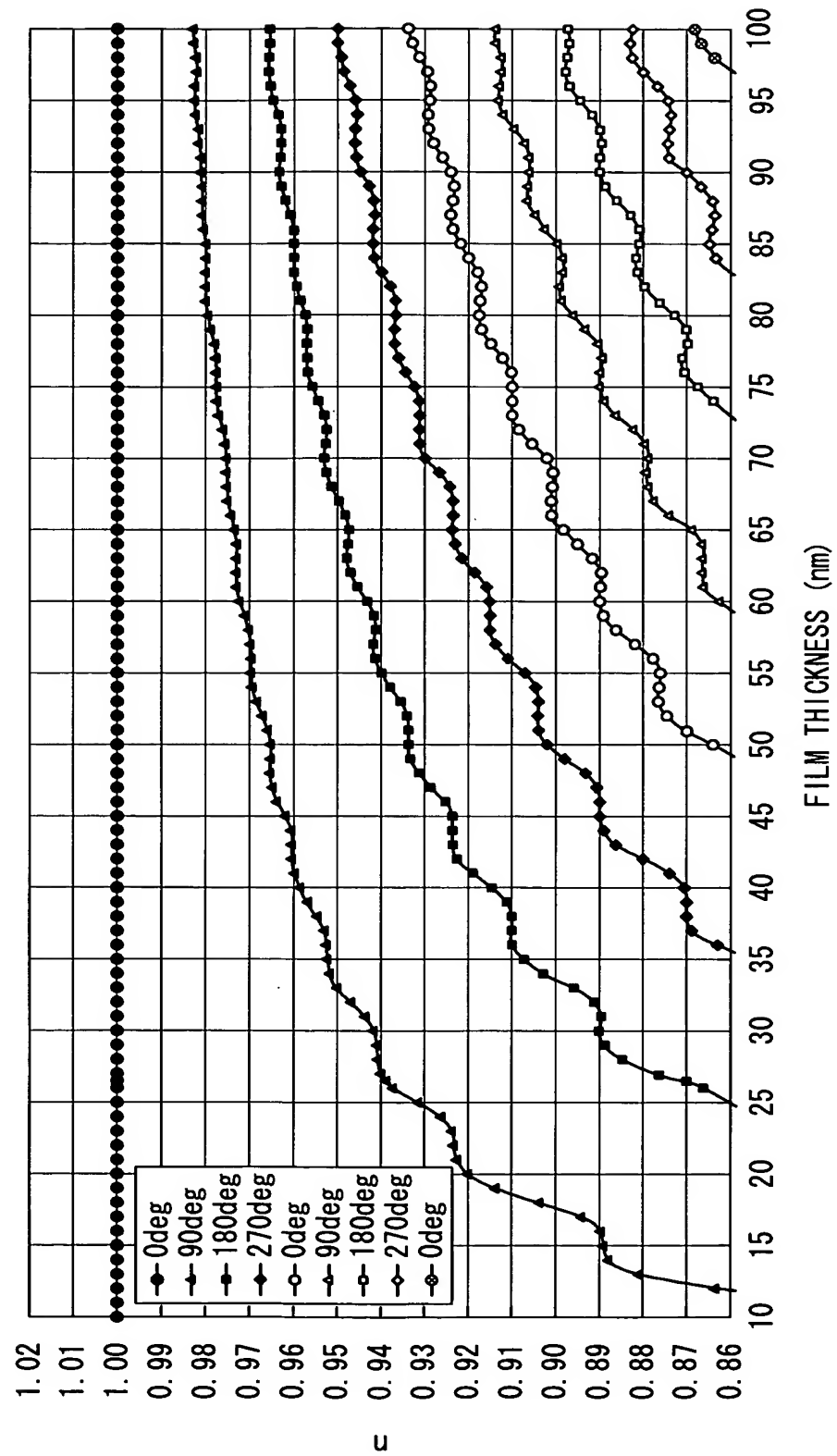
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FIG. 2



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FIG. 3



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λ

FIG. 4

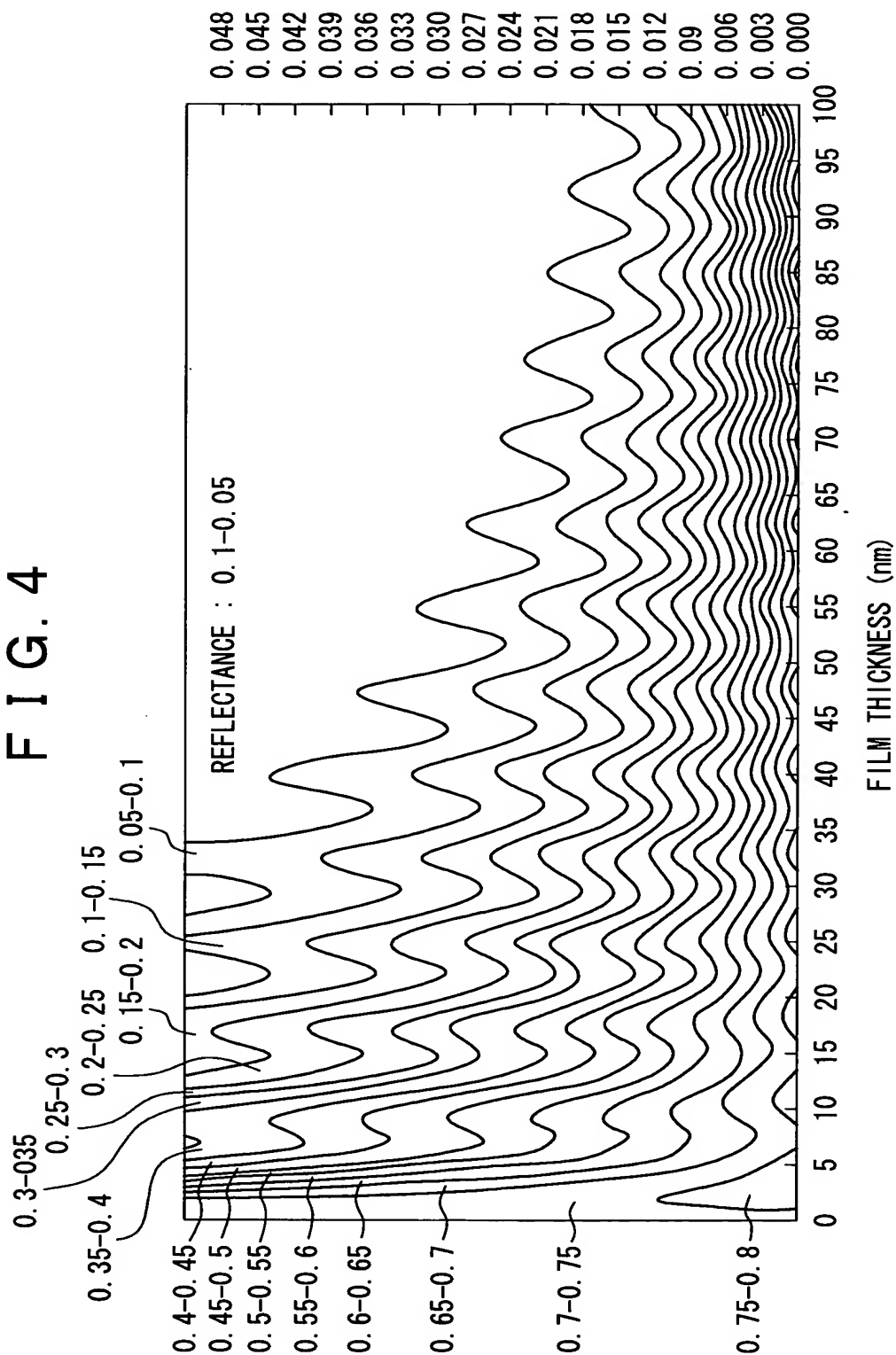
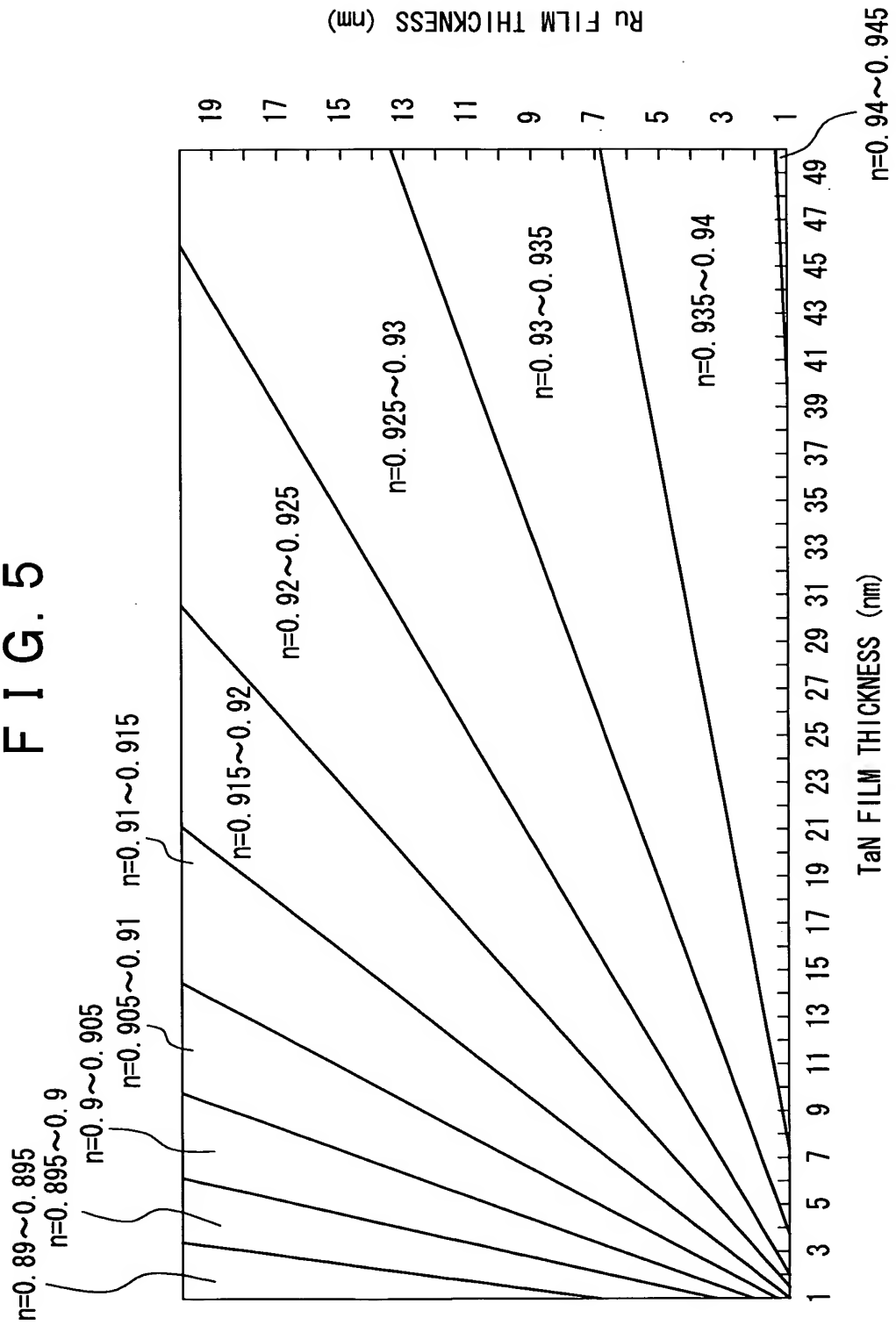
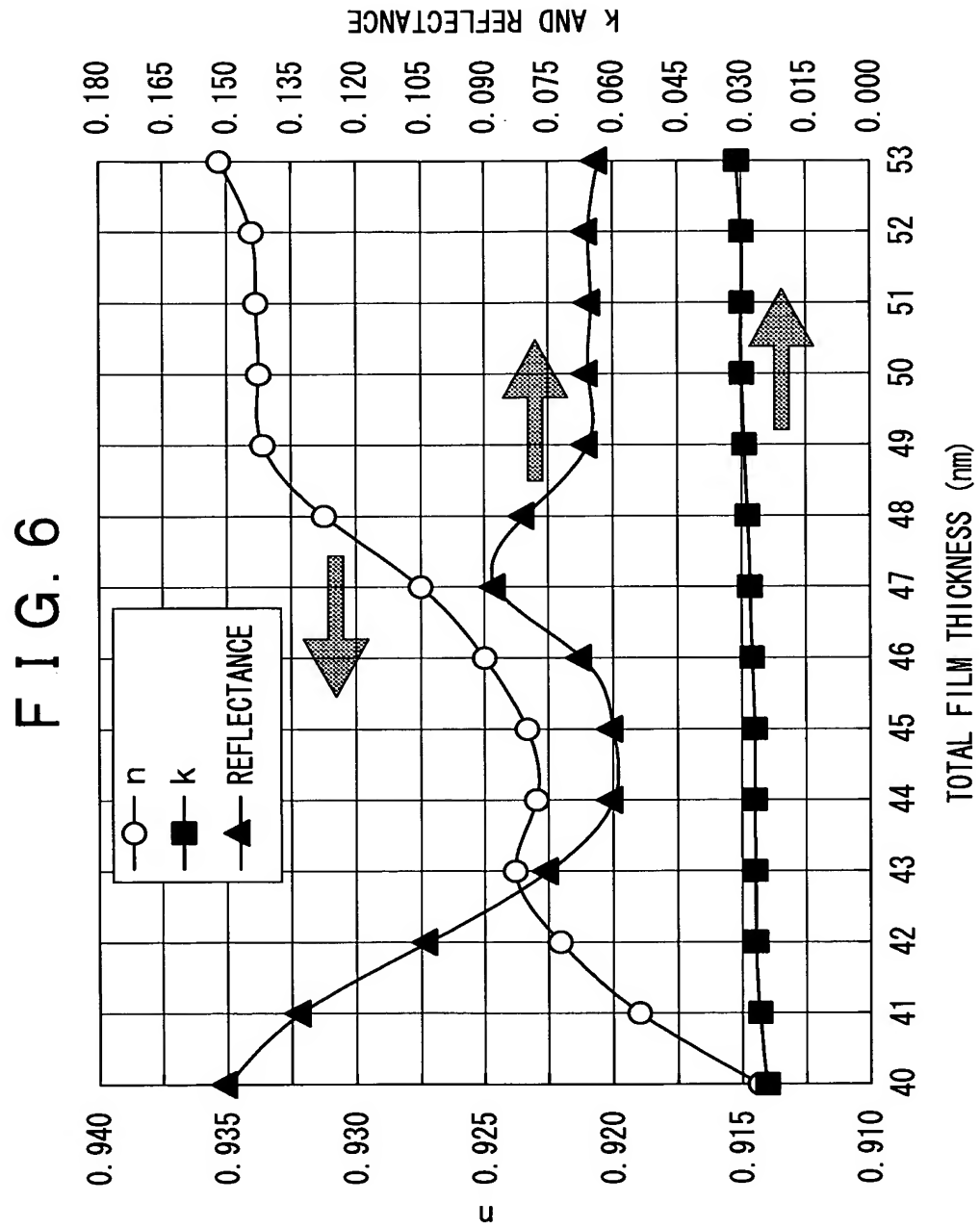


FIG. 5



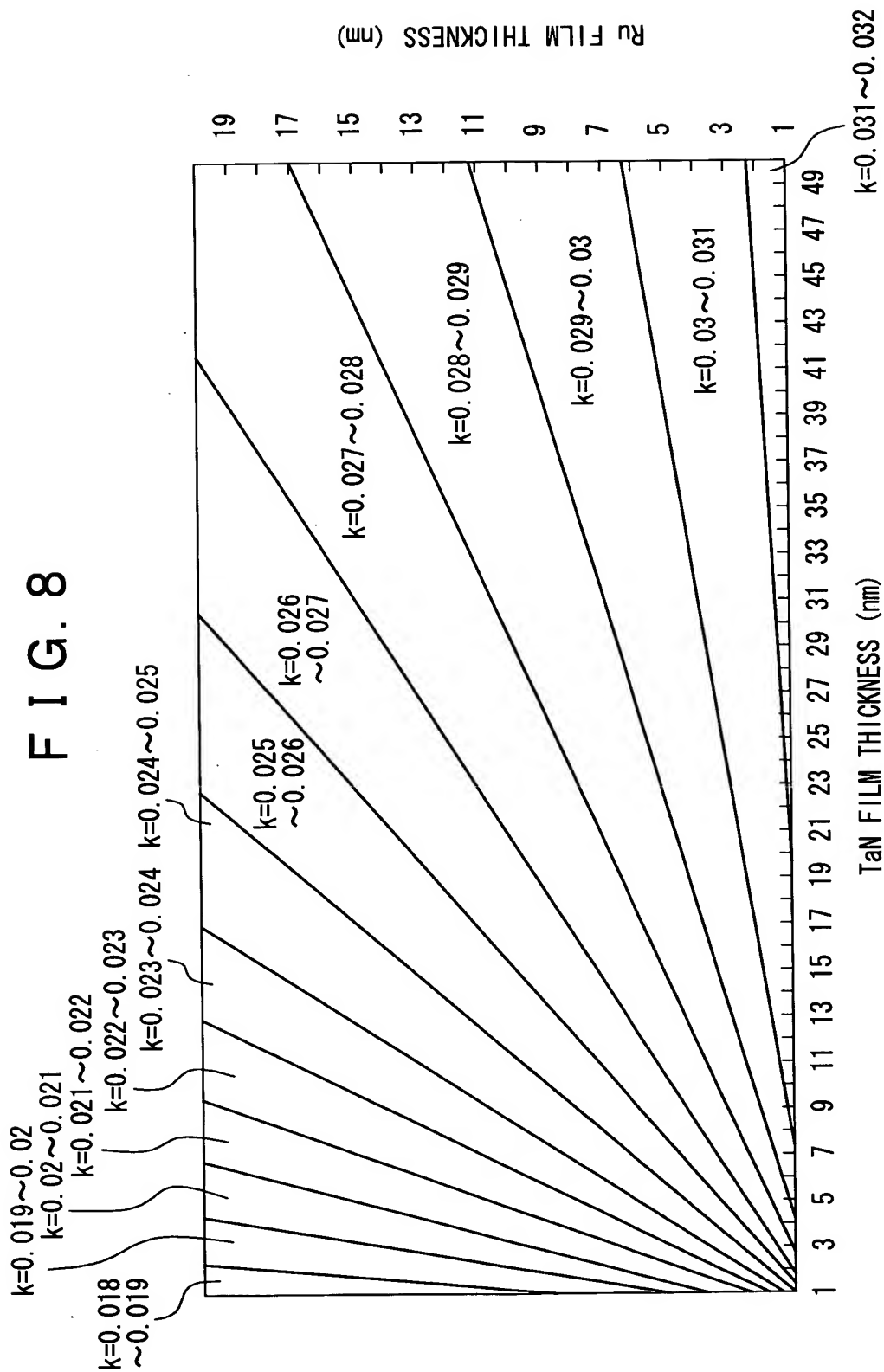
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F I G. 7

TOTAL THICKNESS (nm)	Ru THICKNESS (nm)	TaN THICKNESS (nm)
40	20	20
41	17	24
42	15	27
43	14	29
44	15	29
45	15	30
46	14	32
47	12	35
48	9	39
49	7	42
50	7	43
51	7	44
52	7	45
53	6	47



9. GILF

[illegible]

FIG. 10

PHASE DIFFERENCE														
Ru/Cr	25	26	27	28	29	30	31	32	33	34	35	36	37	
0						106.3	159.4	168.7	178.9	186.2	186.8	180.9	177.5	
1										133.953	128.115	124.696	129.087	
2											126.647	130.742	140.4	
3											134.212	143.416	154.824	
4										138.817	147.444	158.579	168.608	
5									158.6	151.3	162.2	172.4	177.5	
6								146.2	154.0	164.7	175.0	180.5	177.2	
7							147.361	155.0	165.7	176.0	181.7	178.6	170.8	
8						147.4	155.0	165.8	176.1	181.7	178.7	170.9	169.9	
9			286.0	146.5	148.0	155.5	166.1	176.4	182.1	179.2	171.6	170.5	177.8	
10		153.3	149.2	150.3	157.5	167.9	178.1	184.0	181.71	174.41	173.034	179.92	191.385	
11	157.9	153.9	154.6	161.2	171.2	181.35	187.667	186.276	179.45	177.51	183.68	194.657	206.692	
12	159.5	159.6	165.6	175.3	185.39	192.153	191.711	185.37	182.8	188.174	198.644	210.516	219.835	
13	164.0	169.5	178.9	188.971	196.115	196.419	190.458	187.361	192.079	202.151				
14	172	181	191.146	198.528	199.238	193.435	194.351	204.231	215.995					

[illegible]

HALF TONE REFLECTANCE 4-6%

[illegible]

FIG. 12

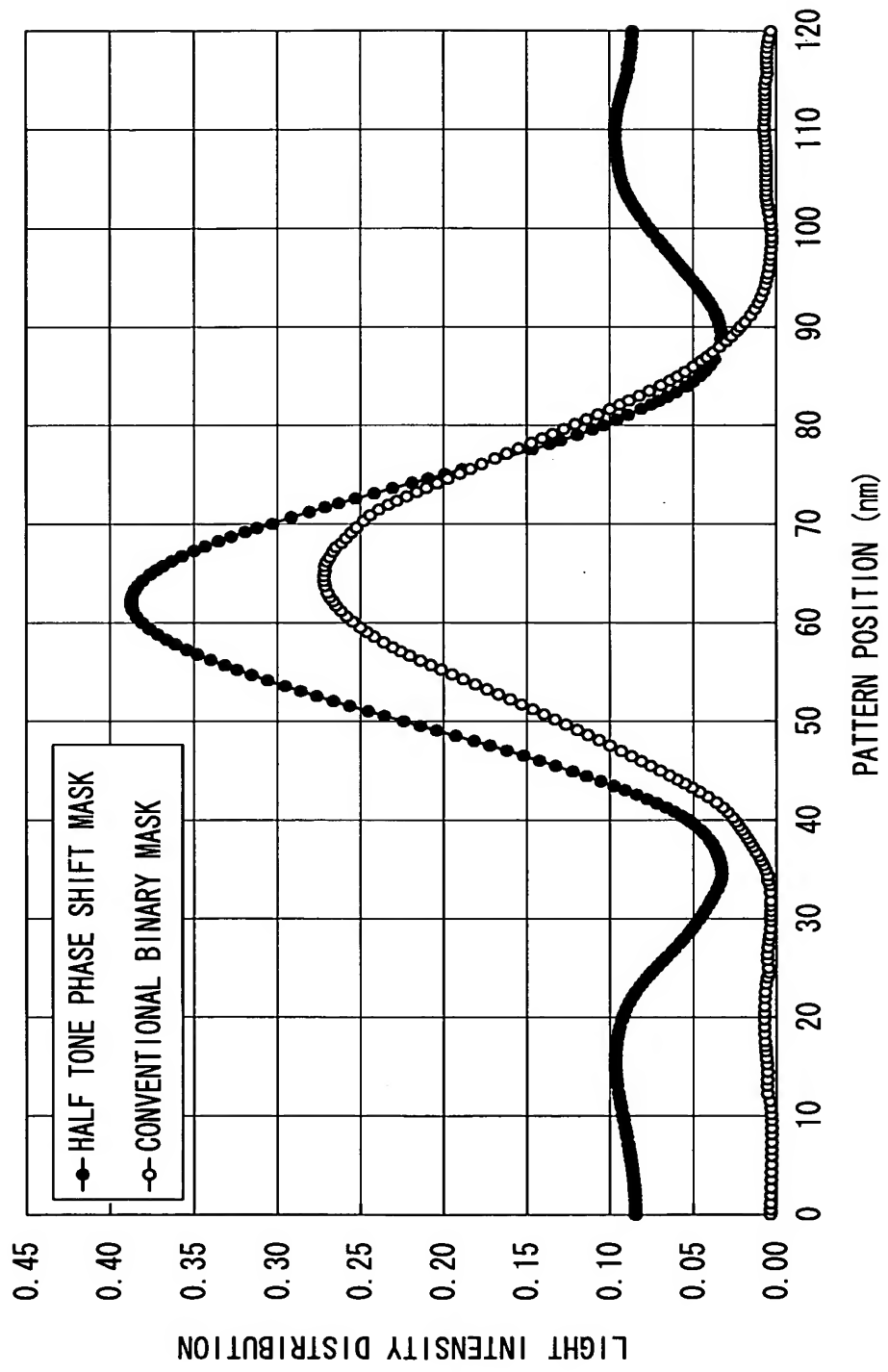
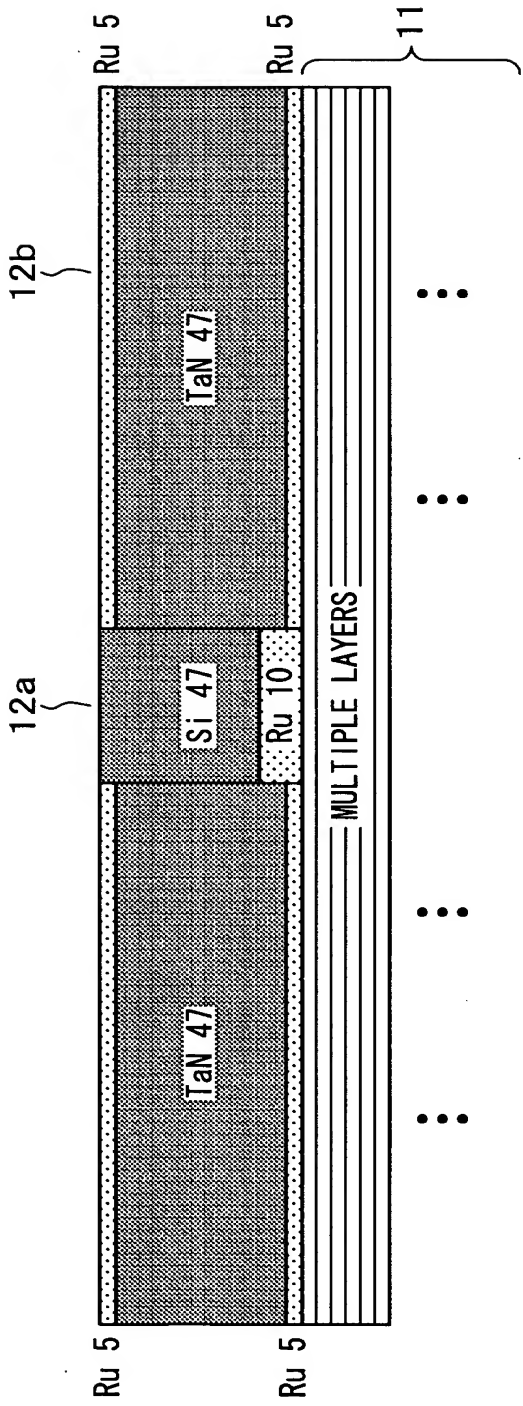


FIG. 13



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FIG. 14

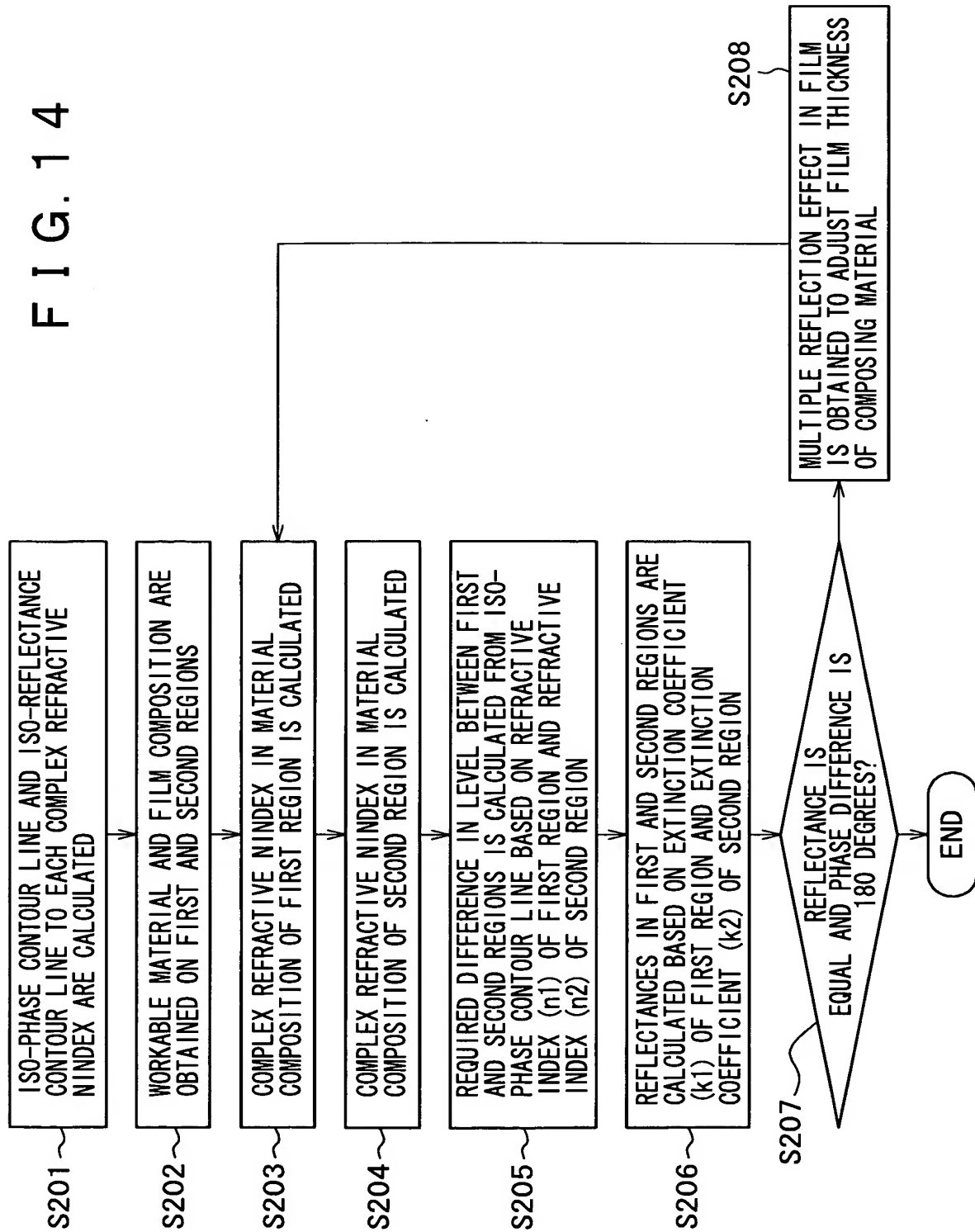
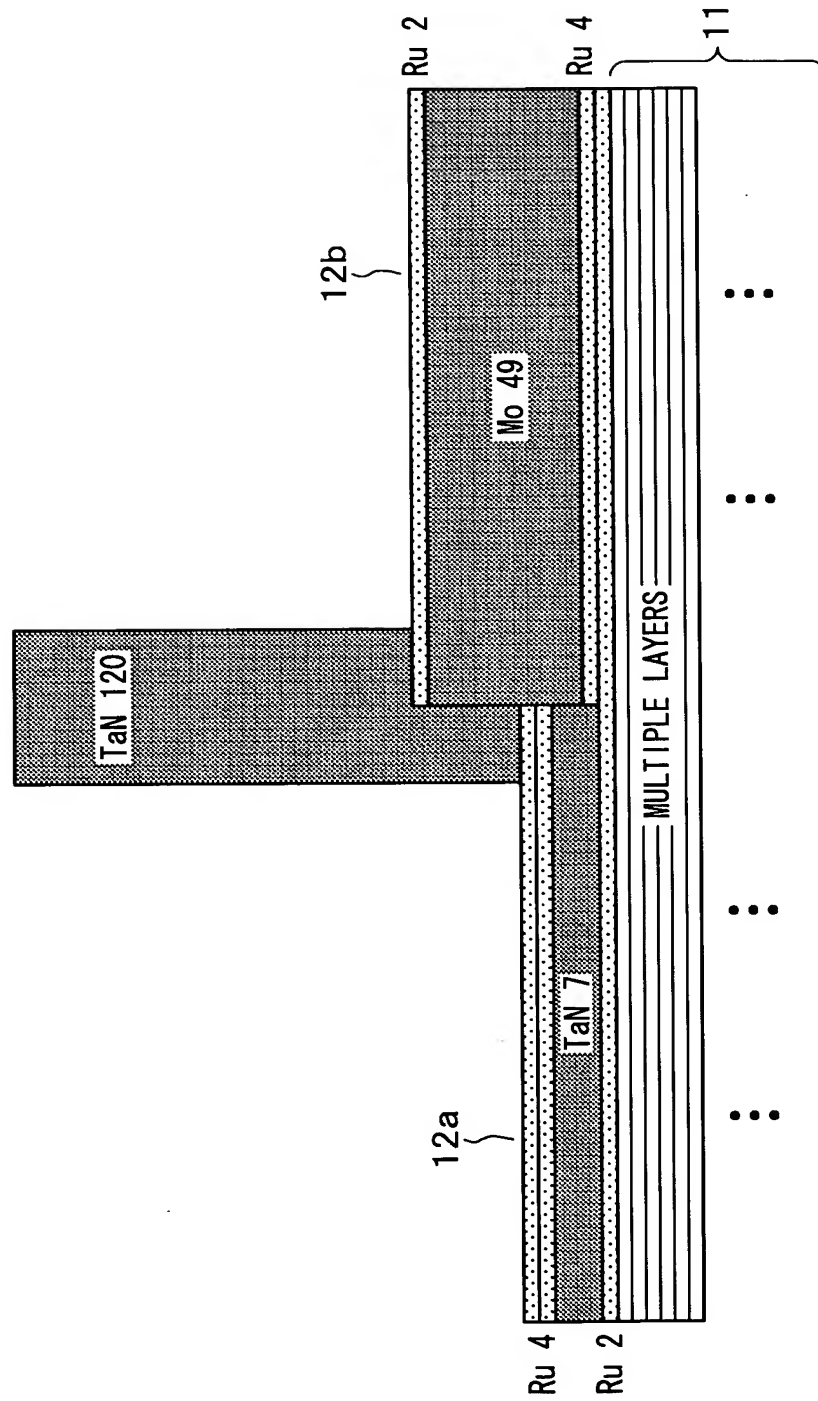
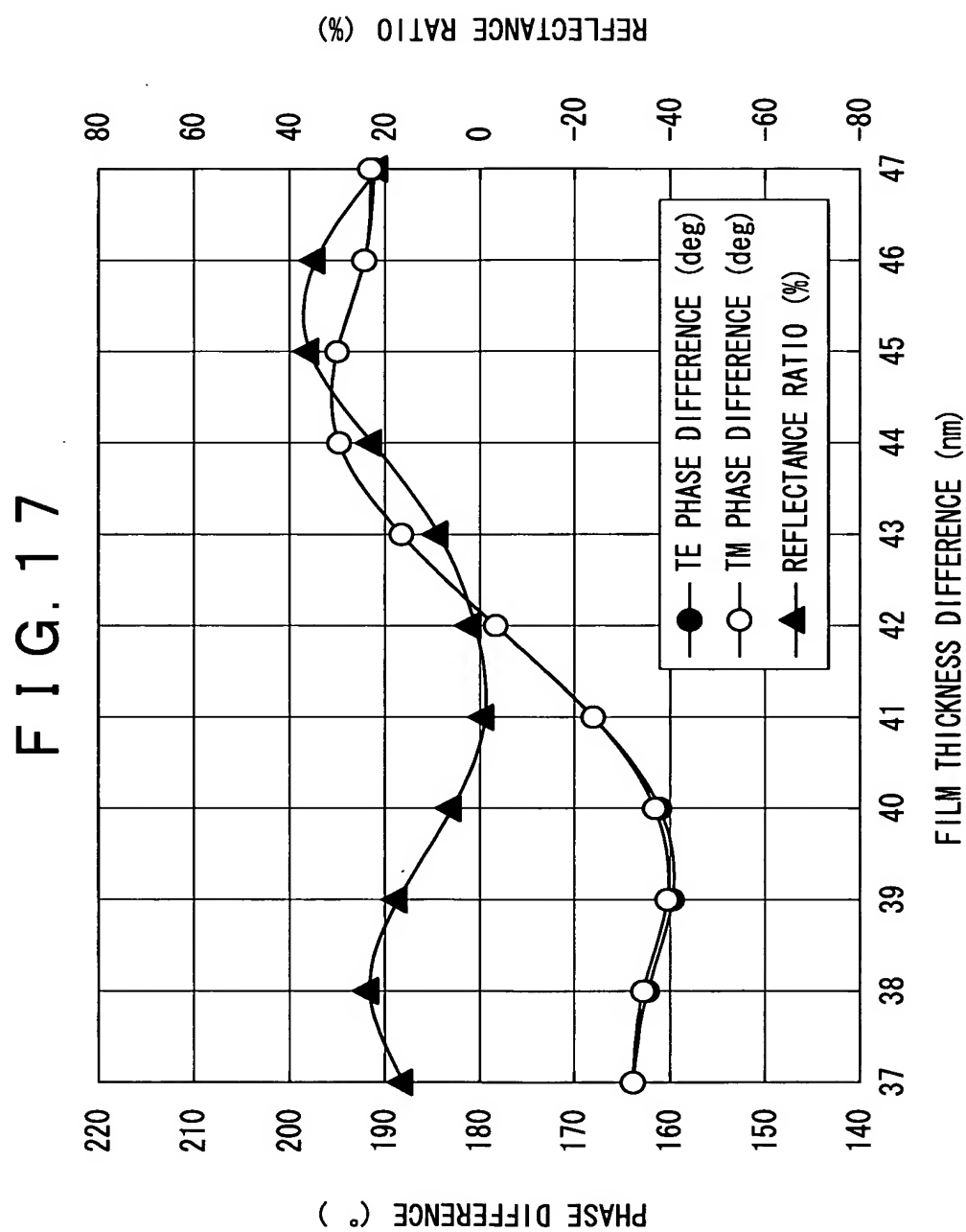


FIG. 16

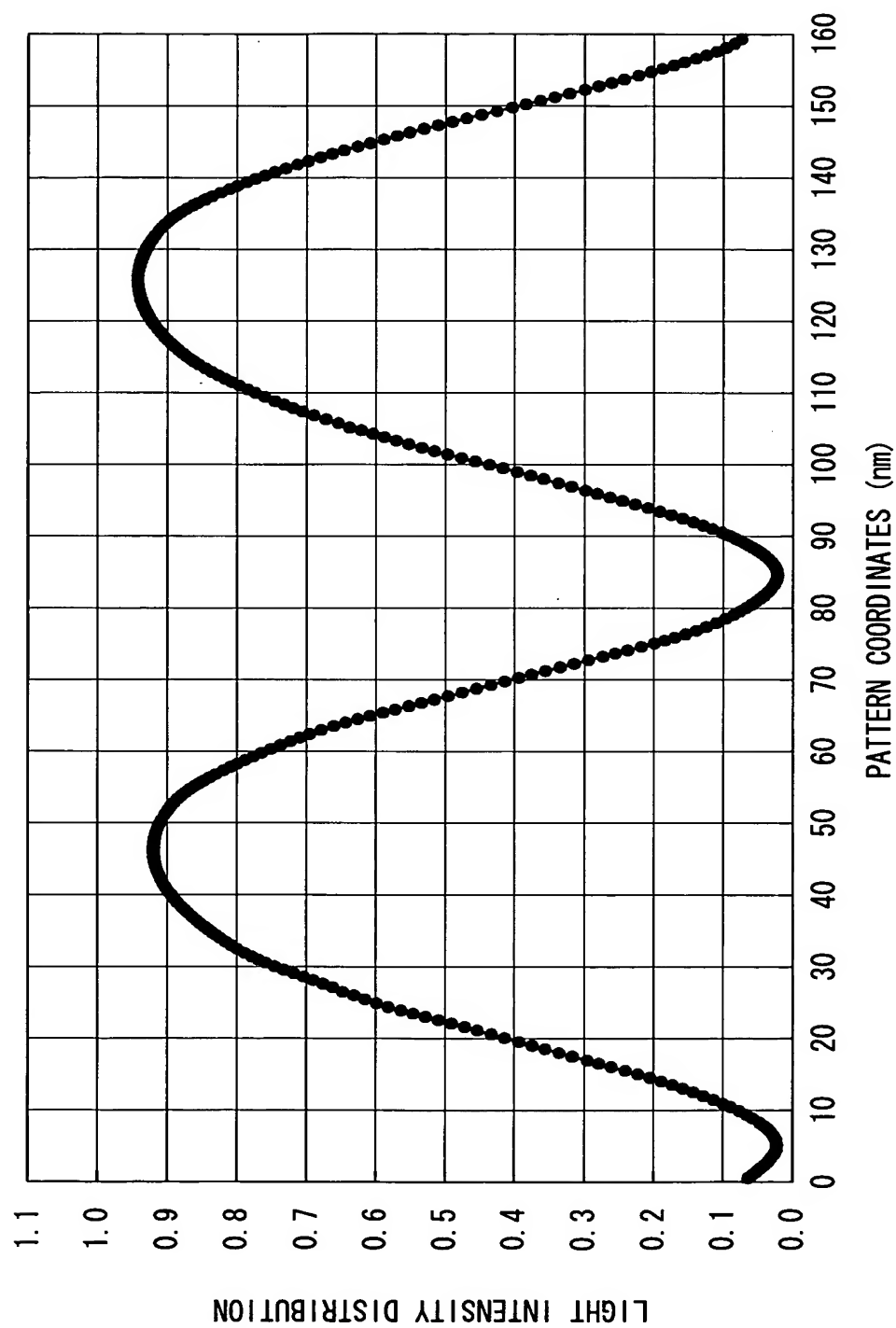


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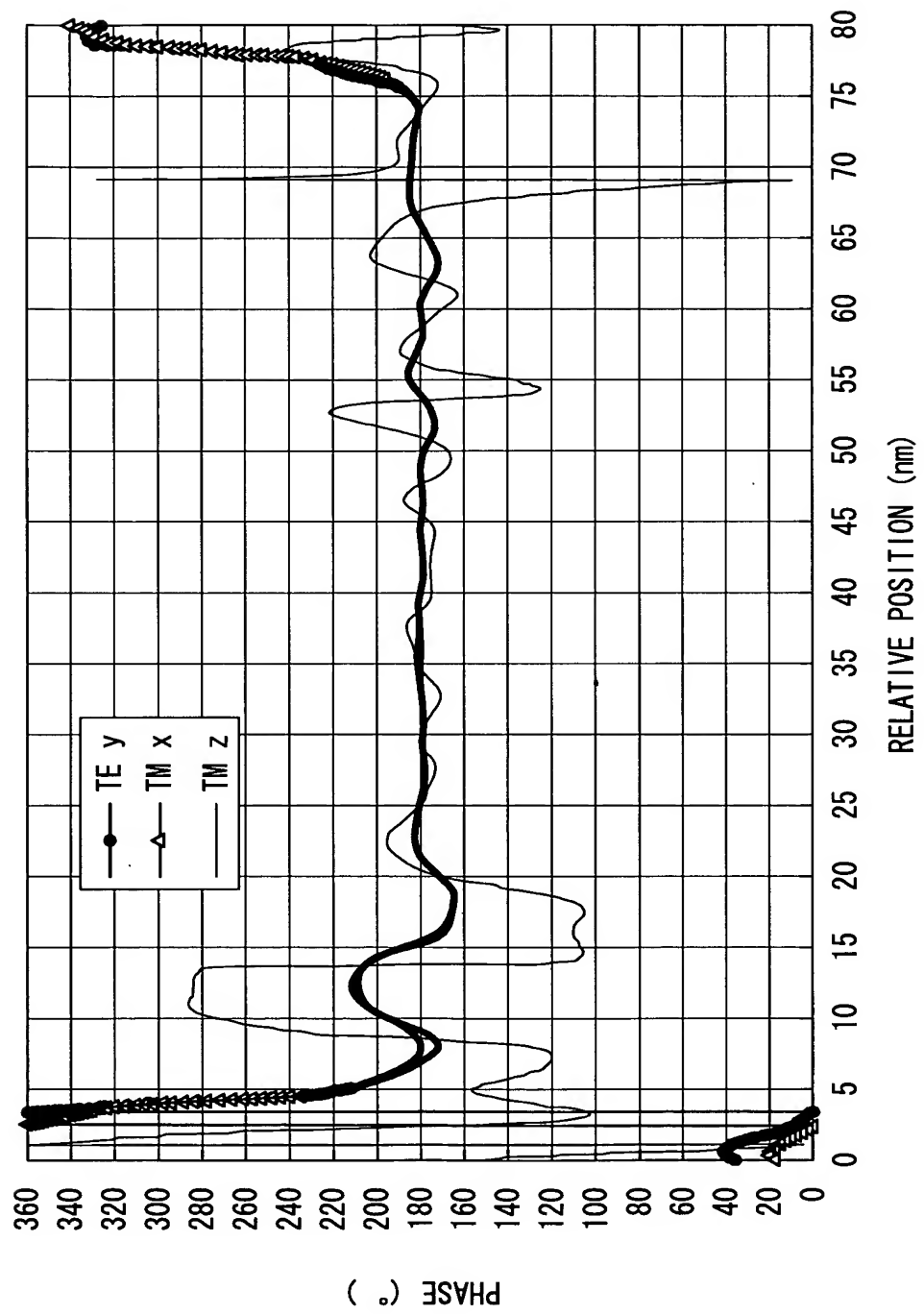
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FIG. 18



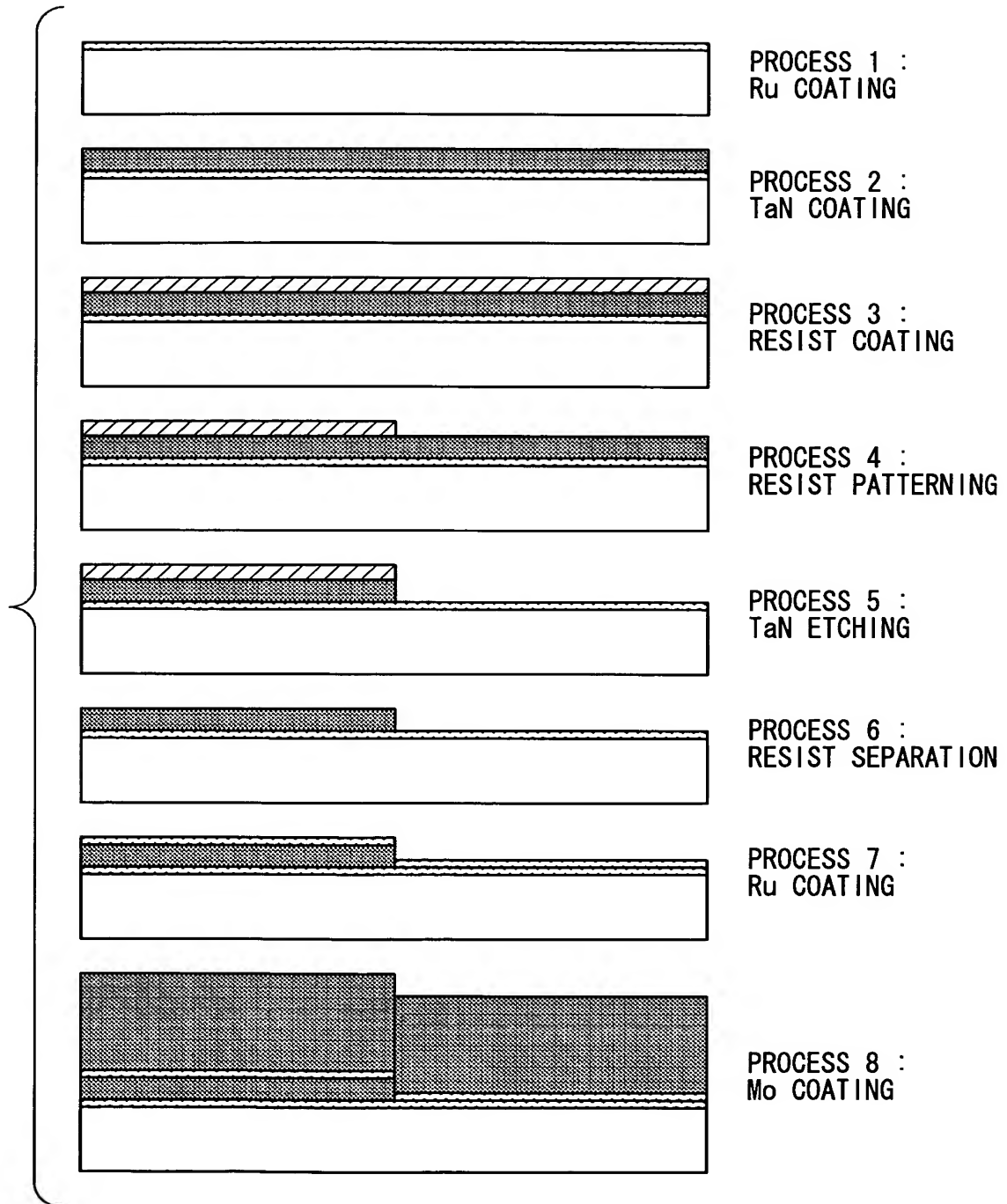
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FIG. 19



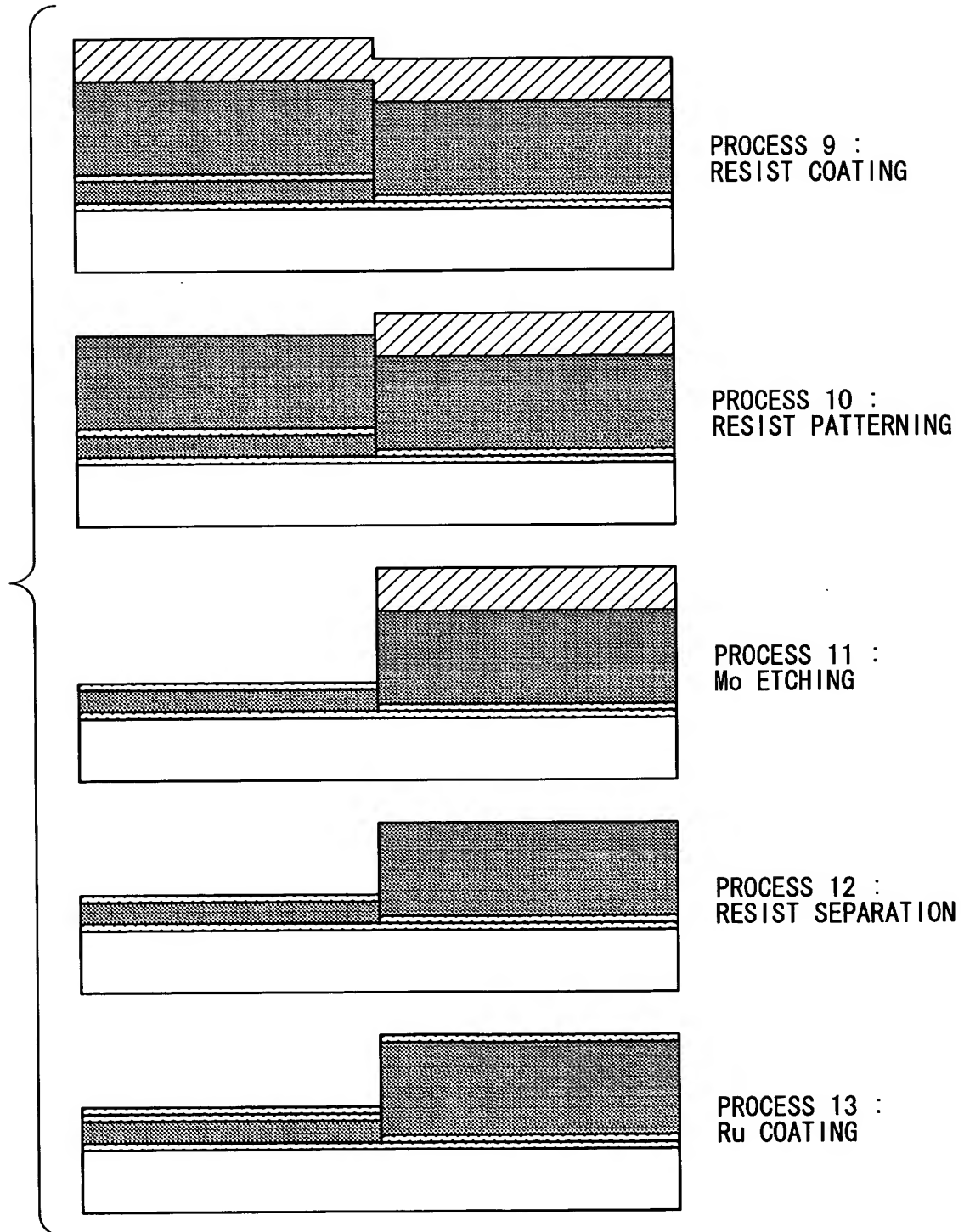
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FIG. 20



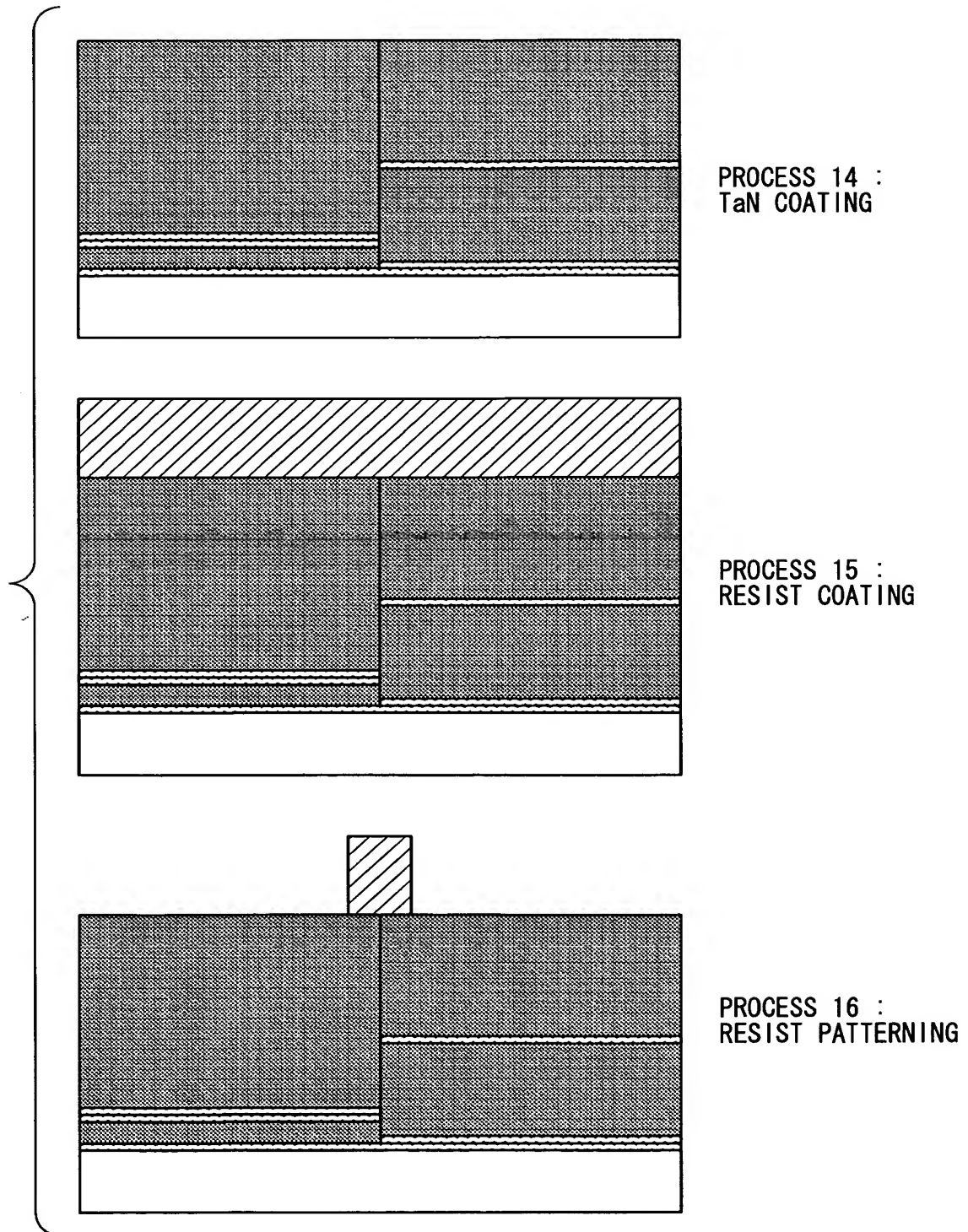
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FIG. 21



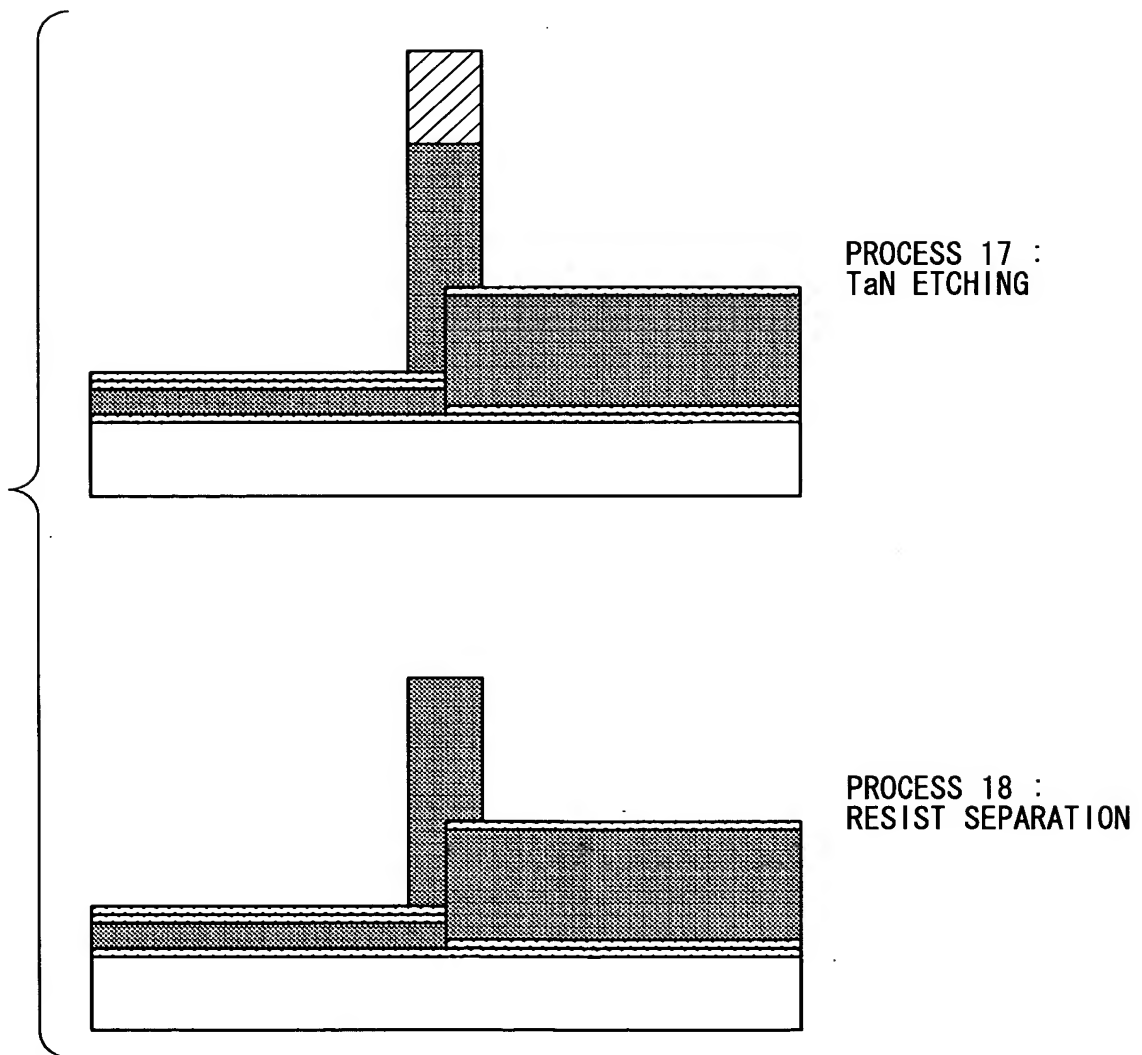
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F I G. 2 2



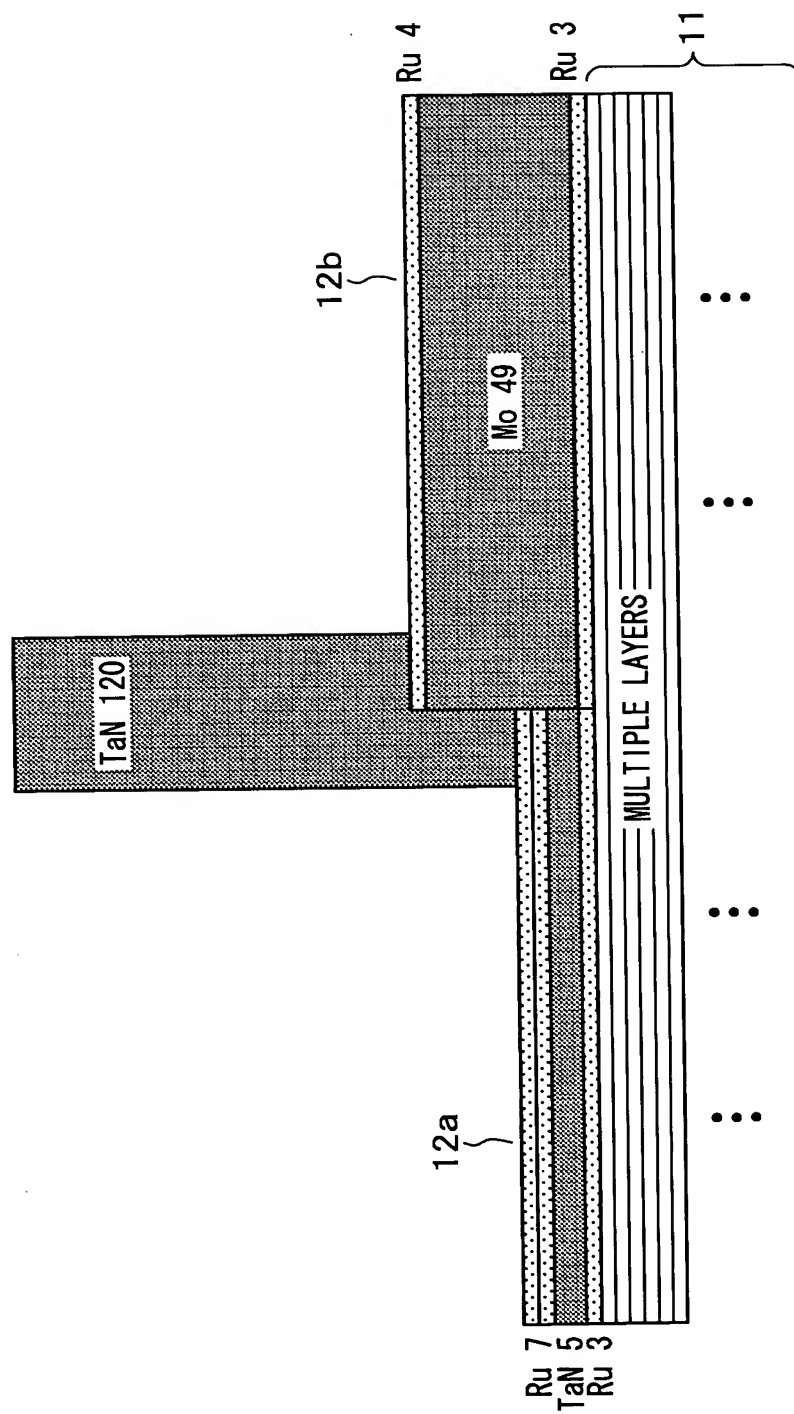
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F I G. 2 3

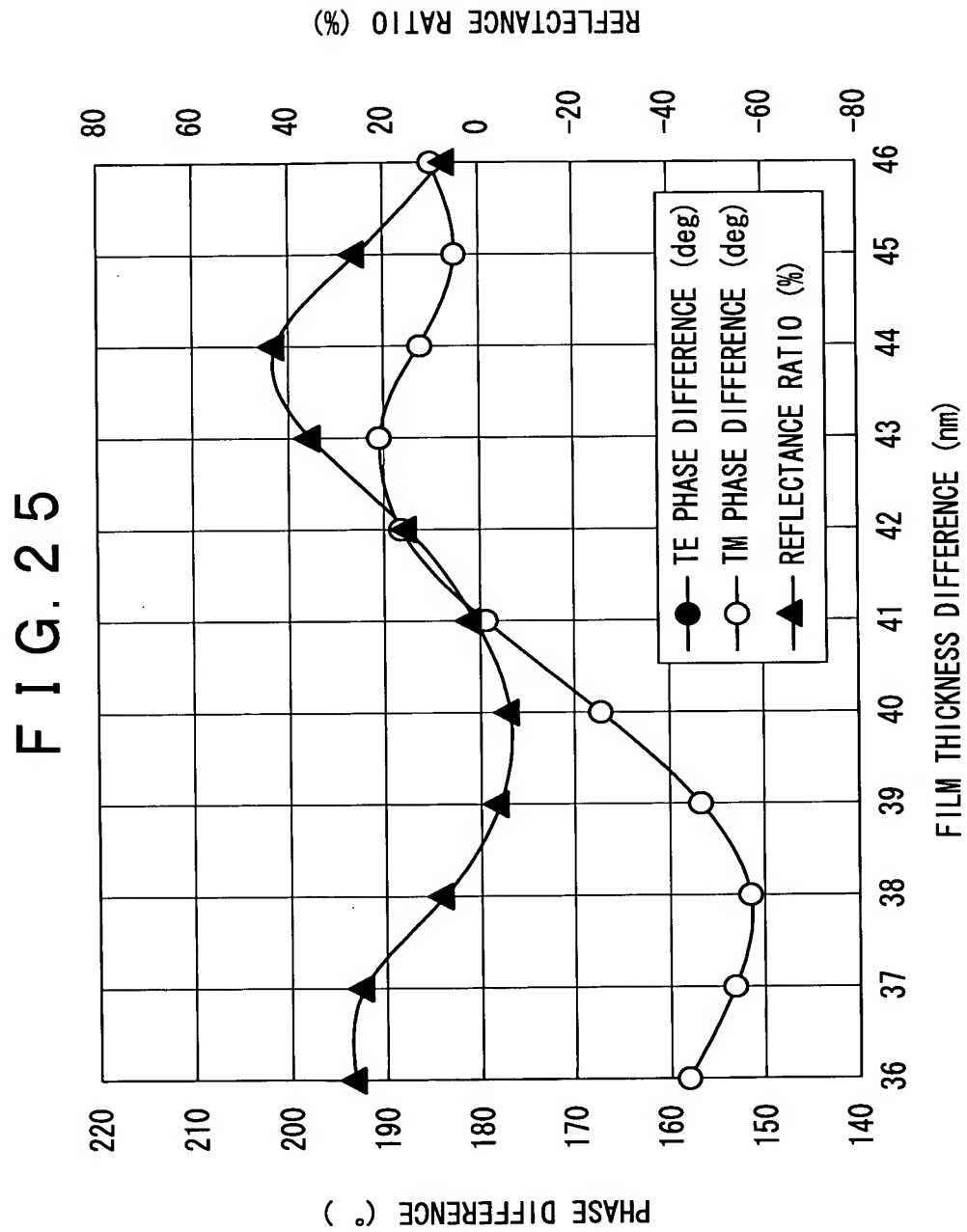


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FIG. 24

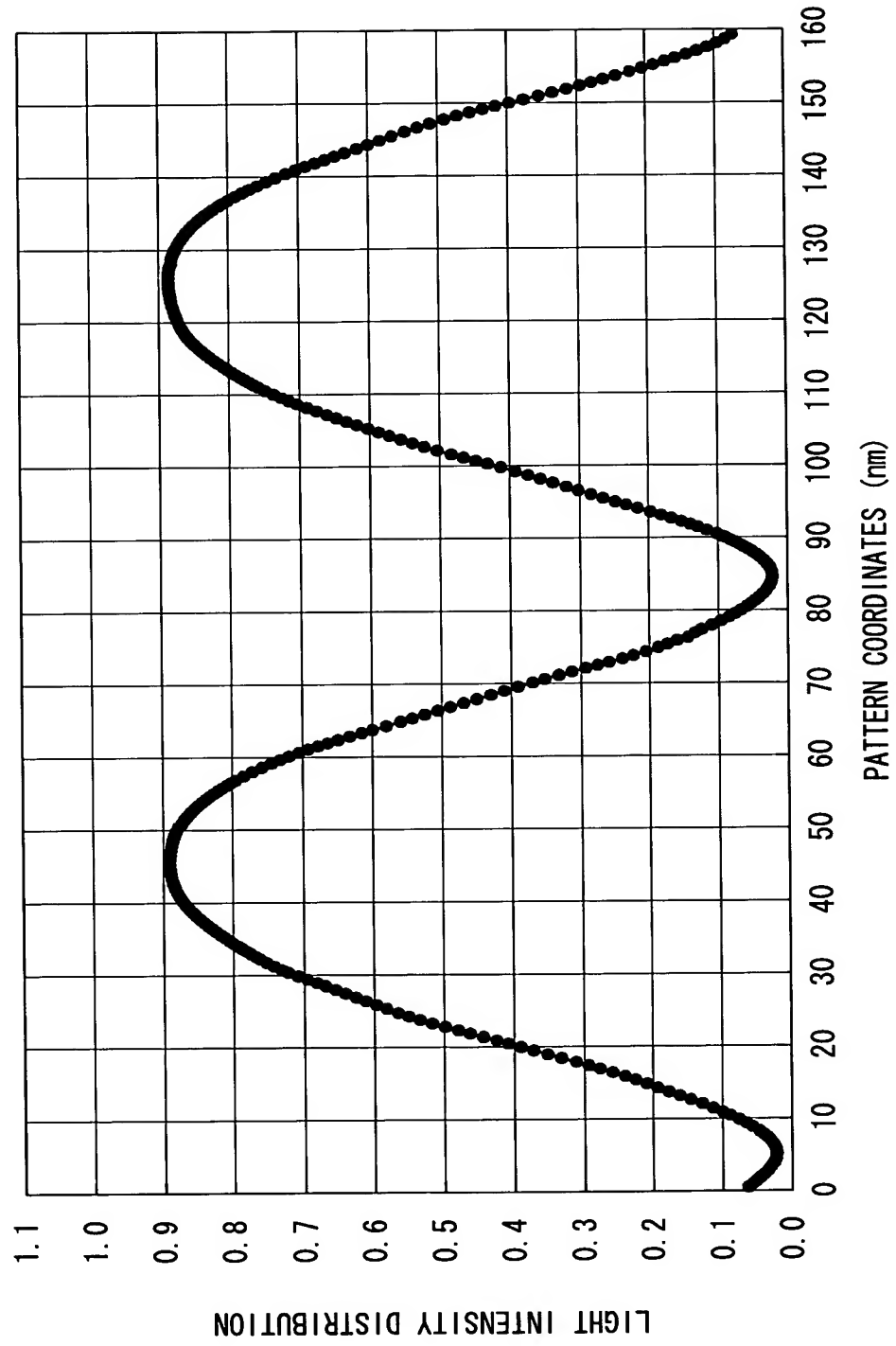


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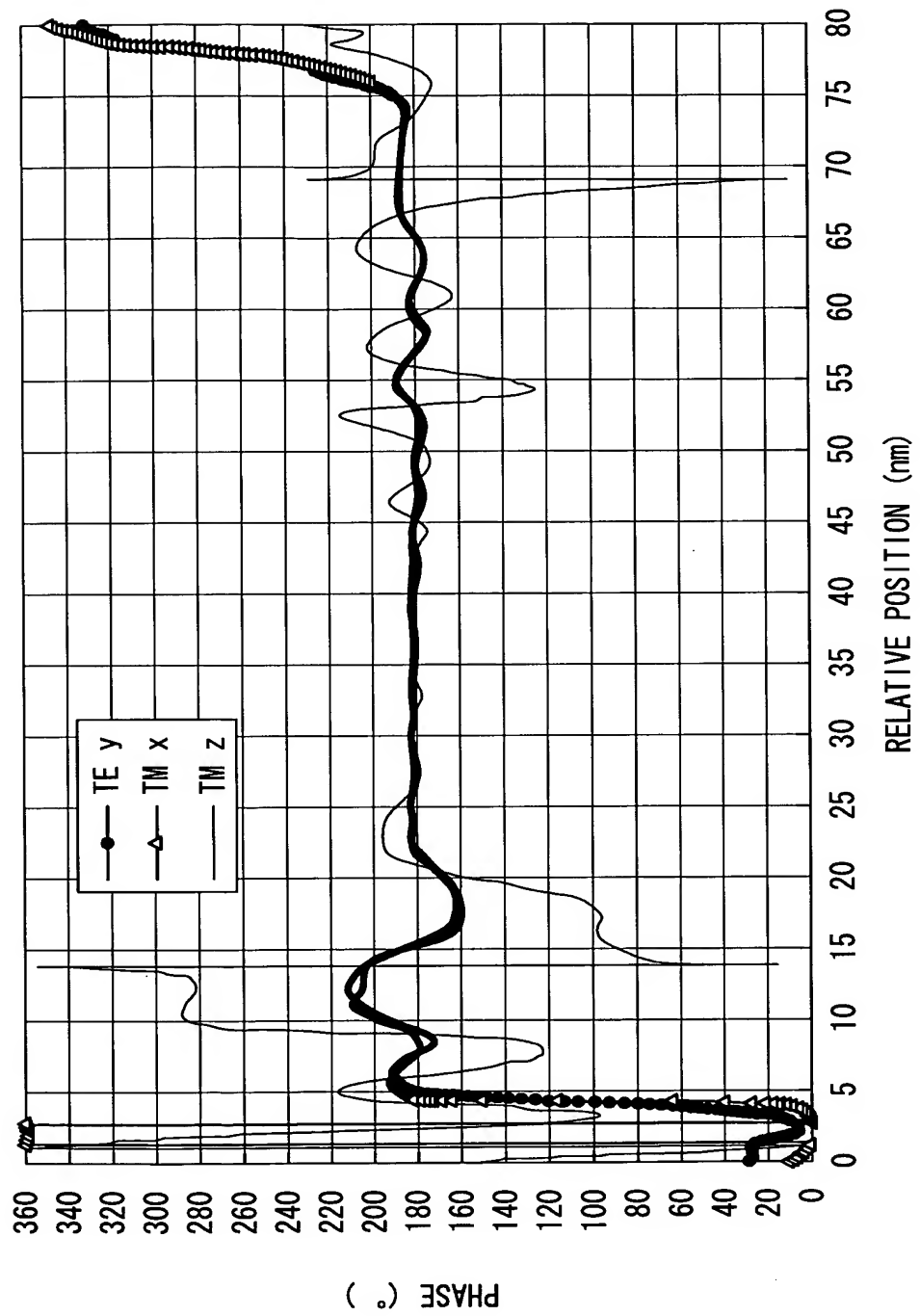
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FIG. 26



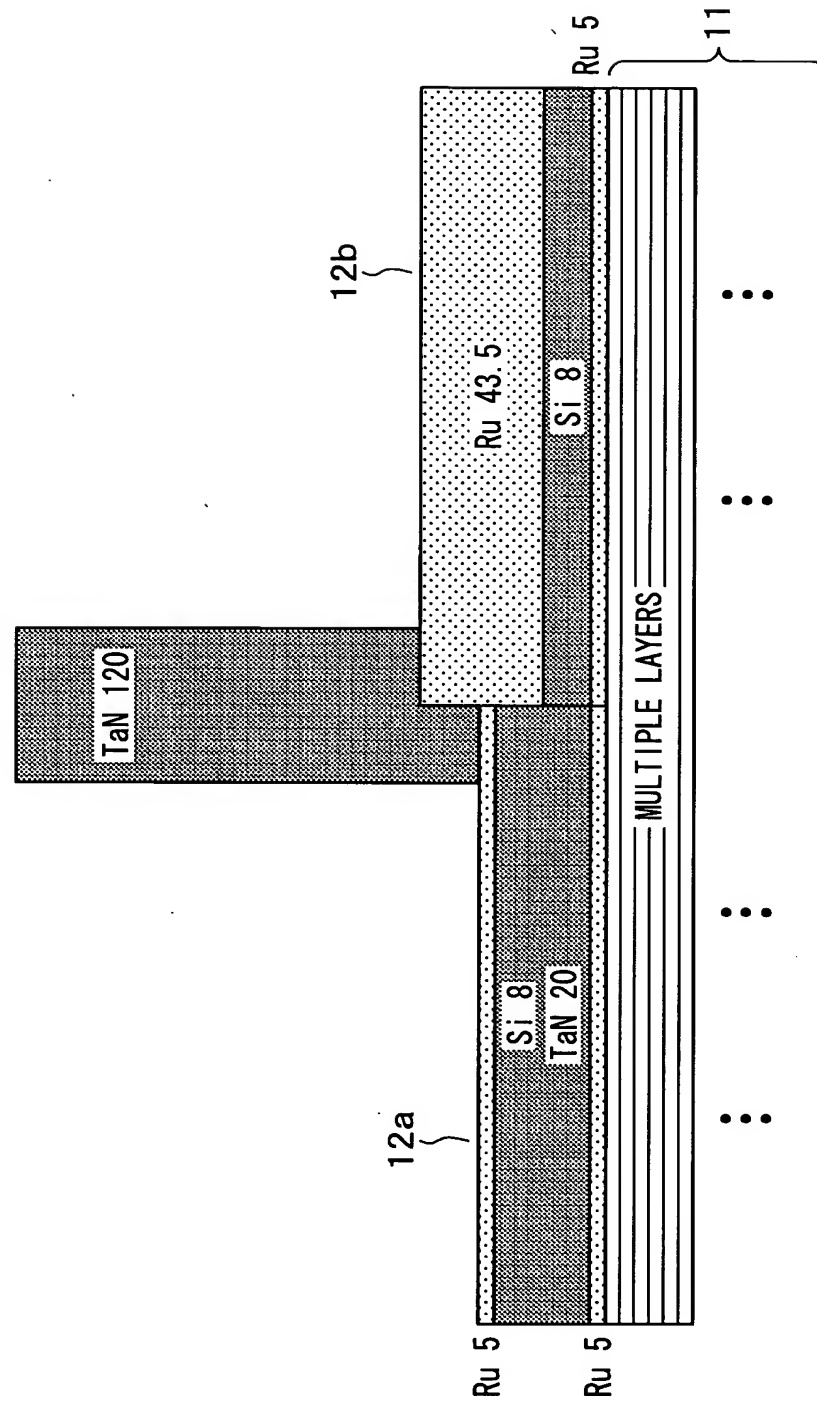
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FIG. 27

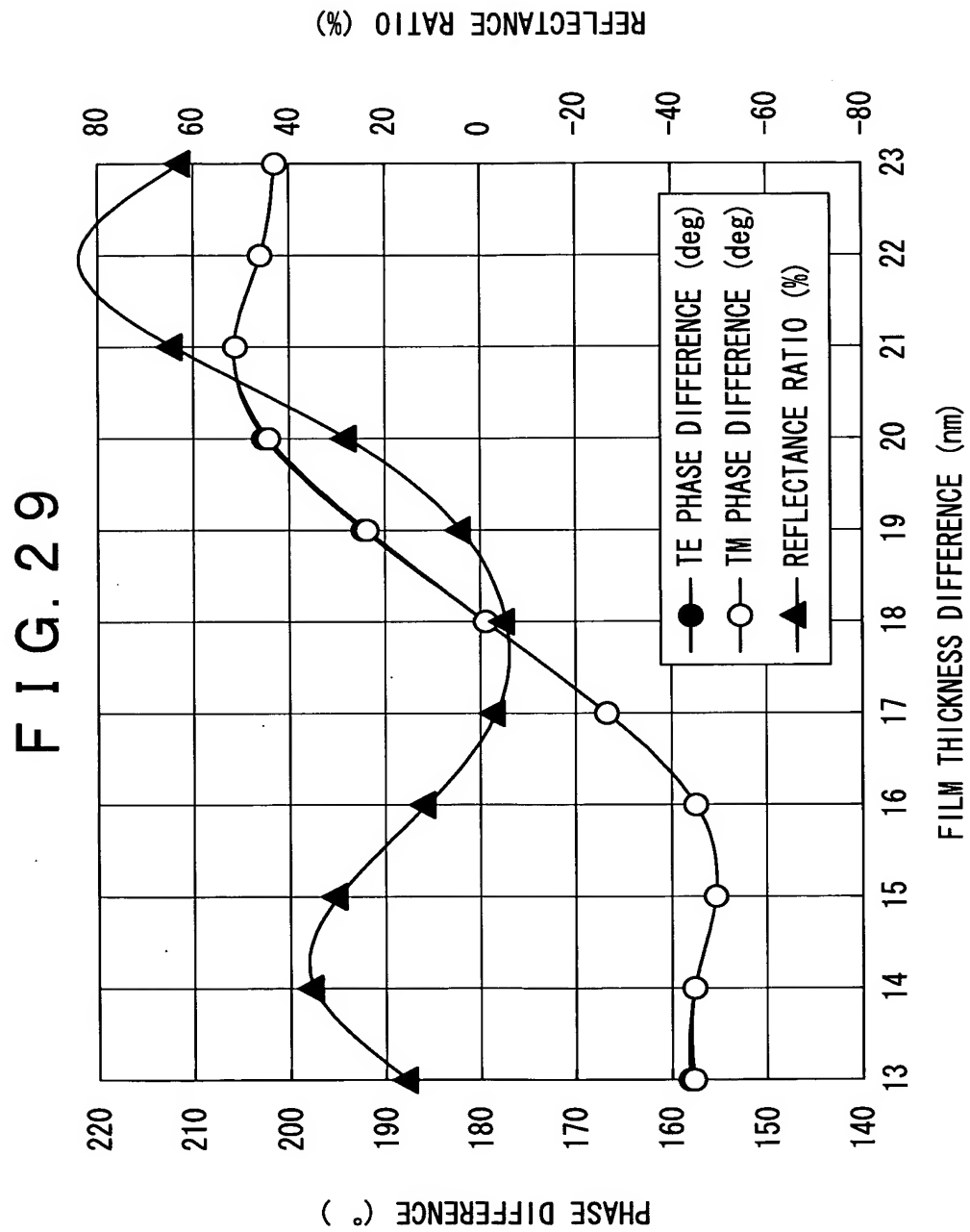


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FIG. 28

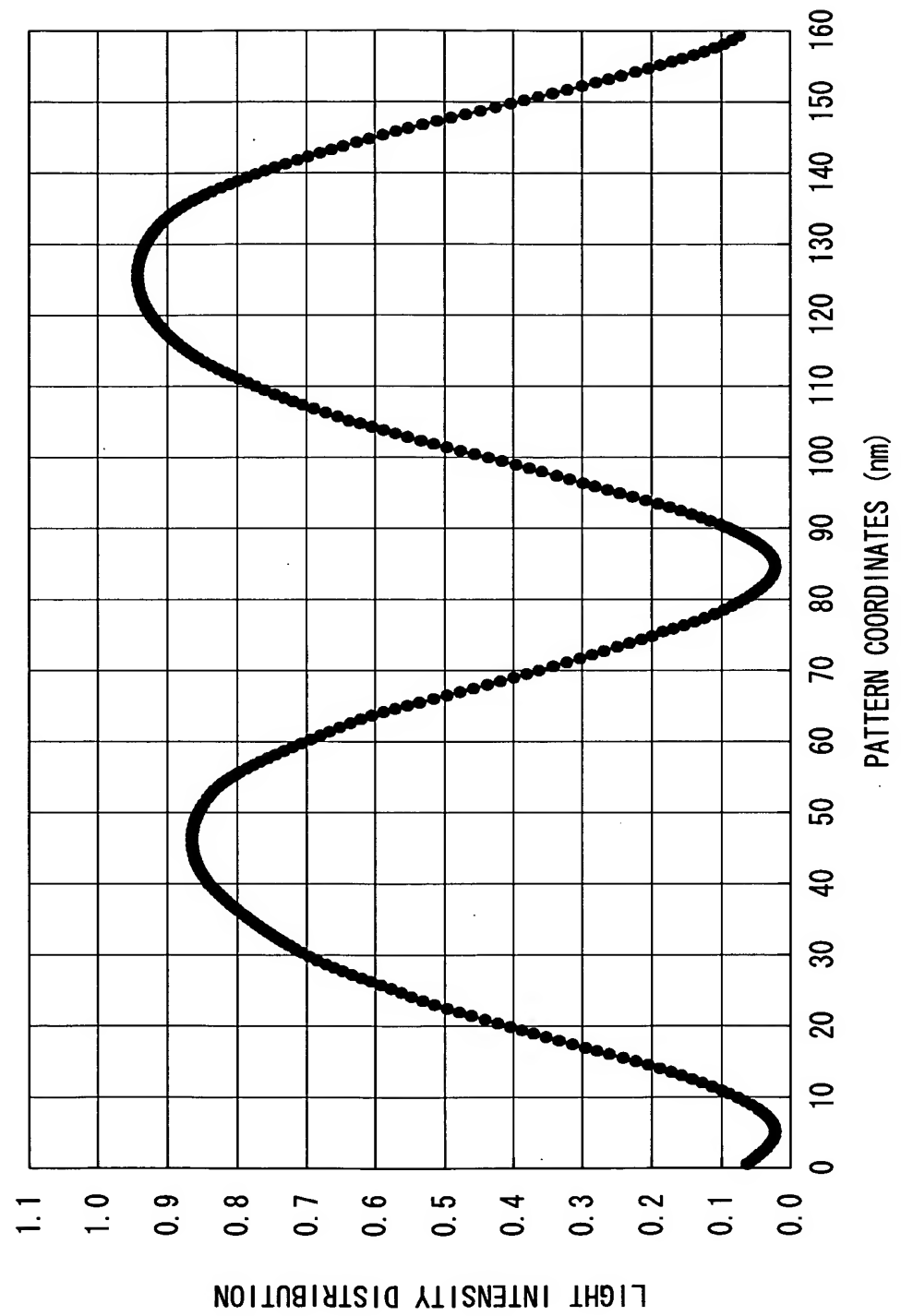


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FIG. 30



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FIG. 31

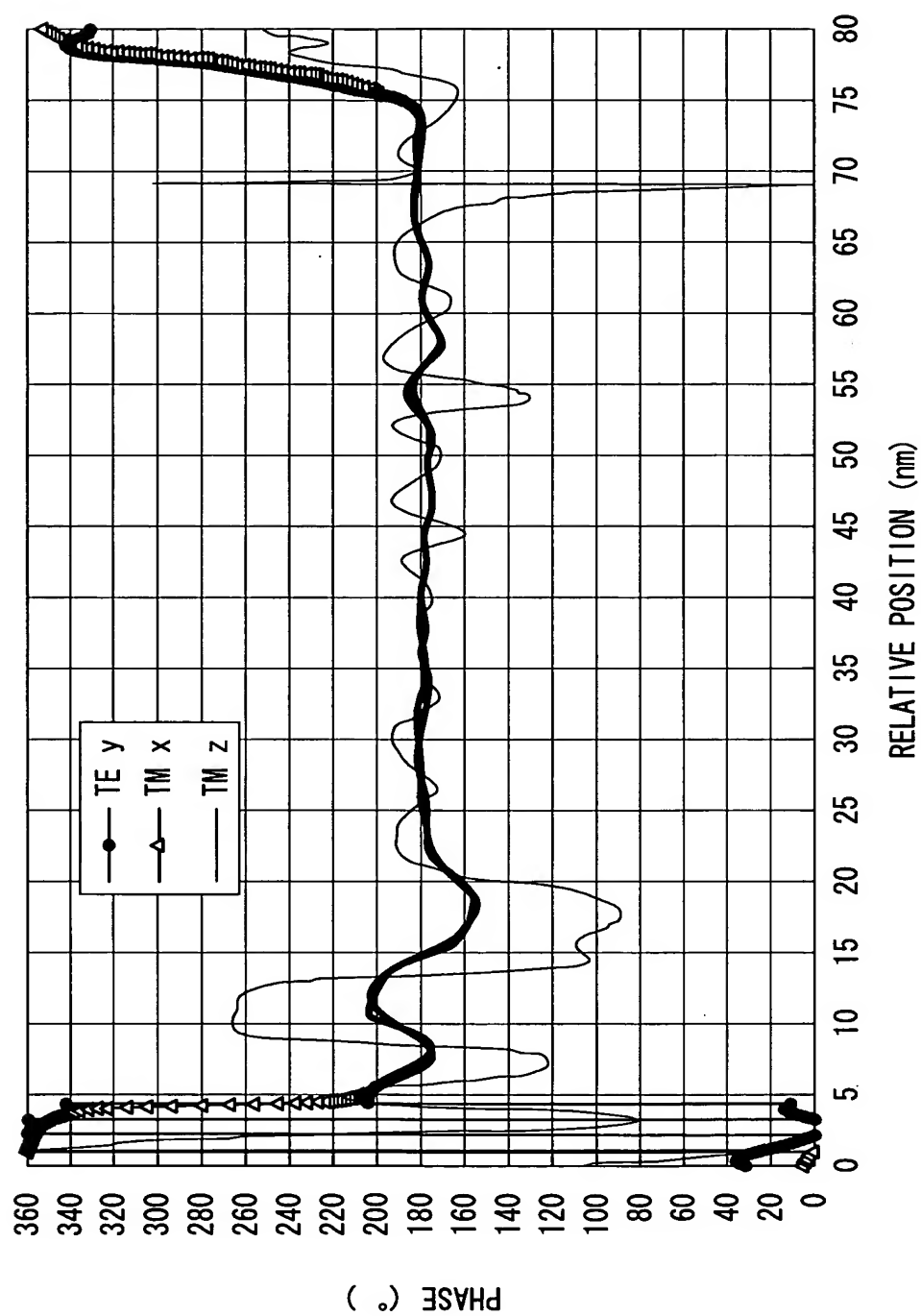


FIG. 32

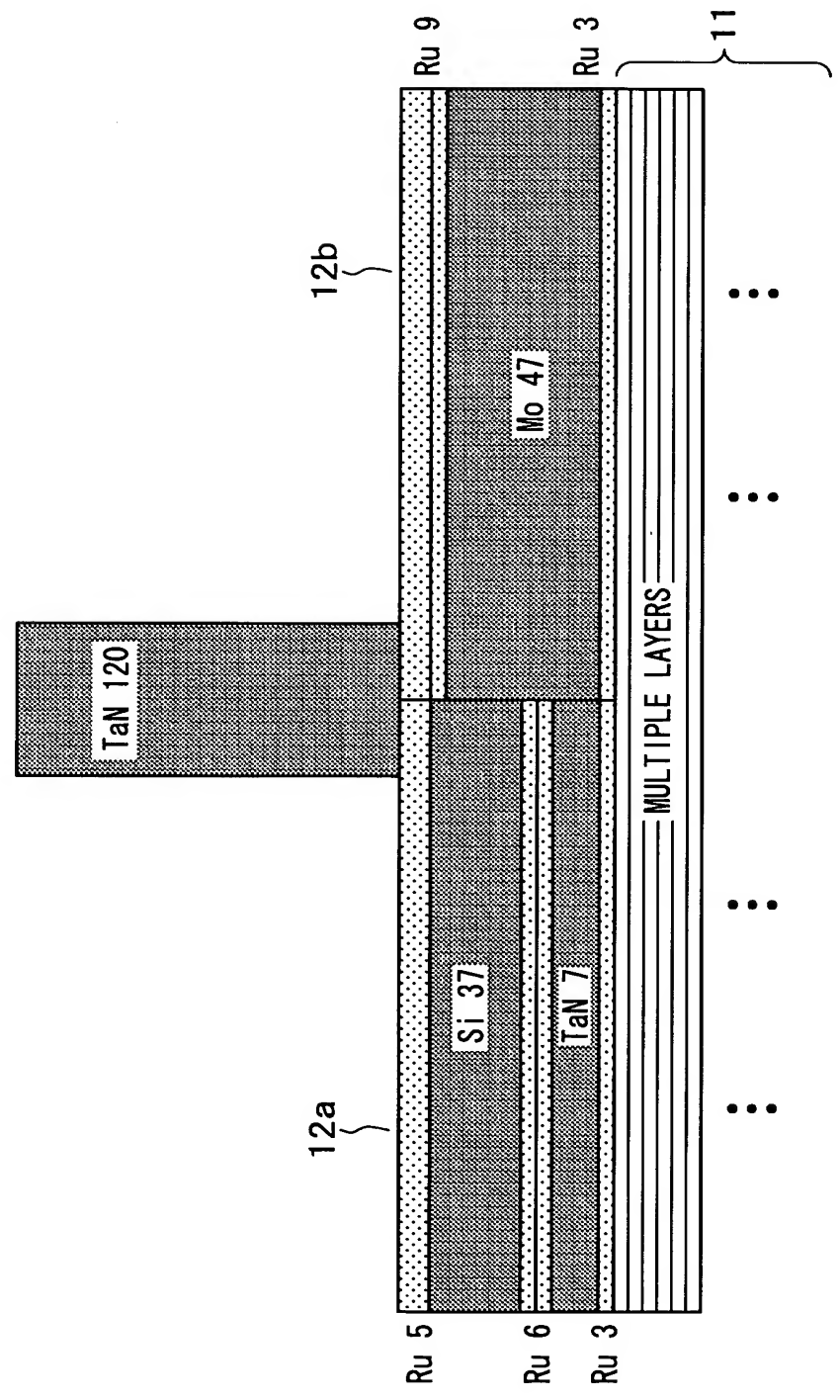
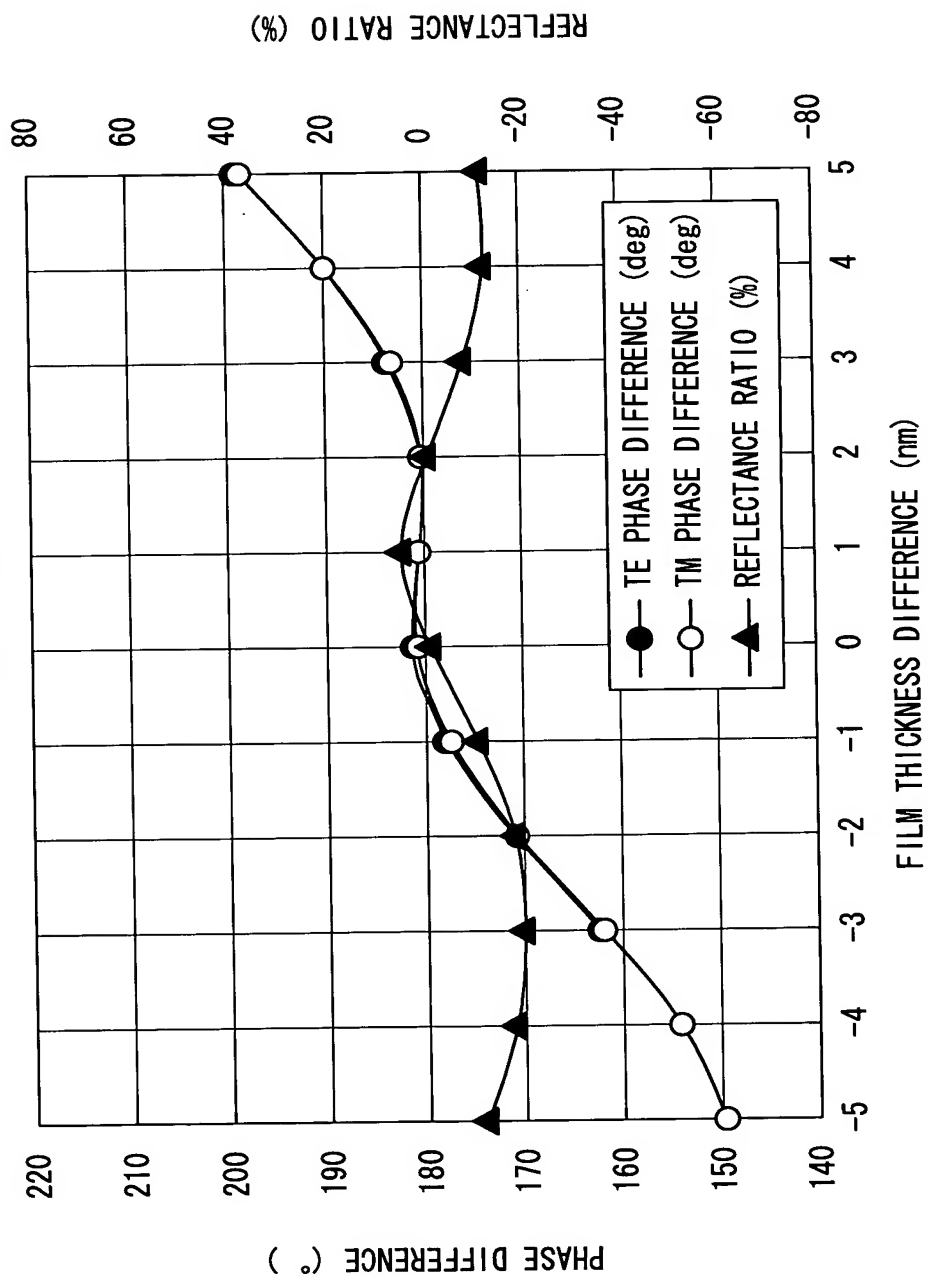
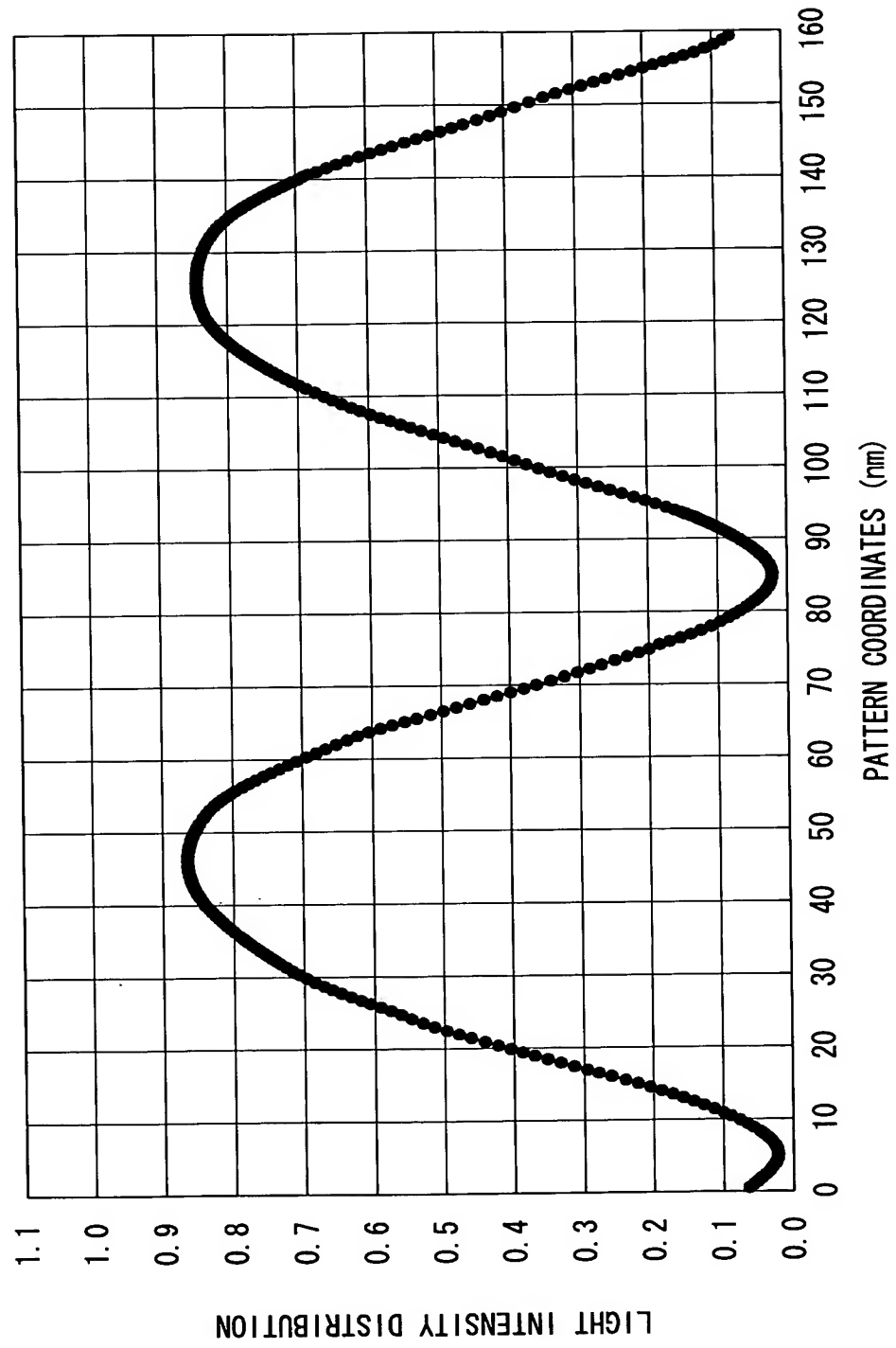


FIG. 33



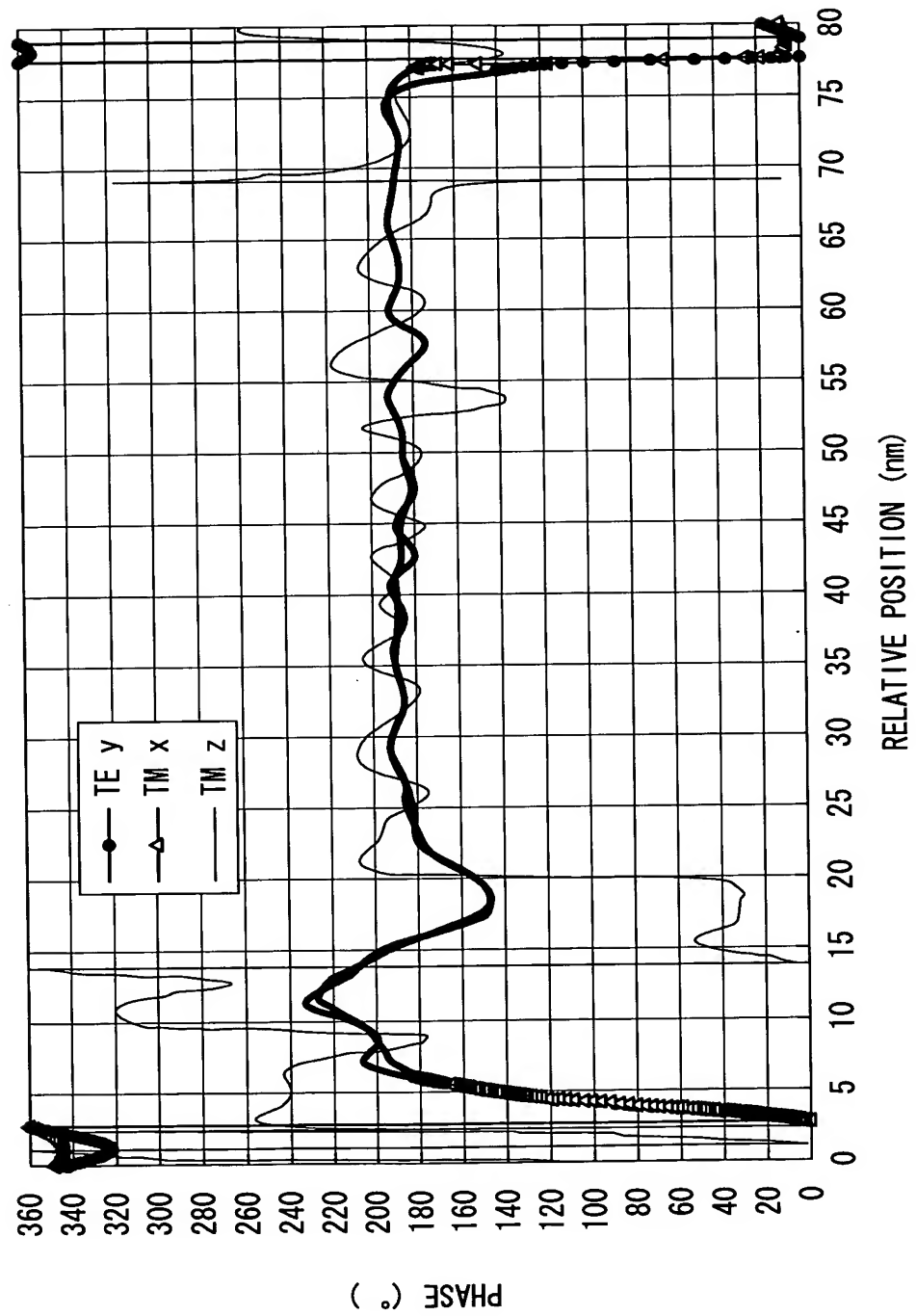
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FIG. 34



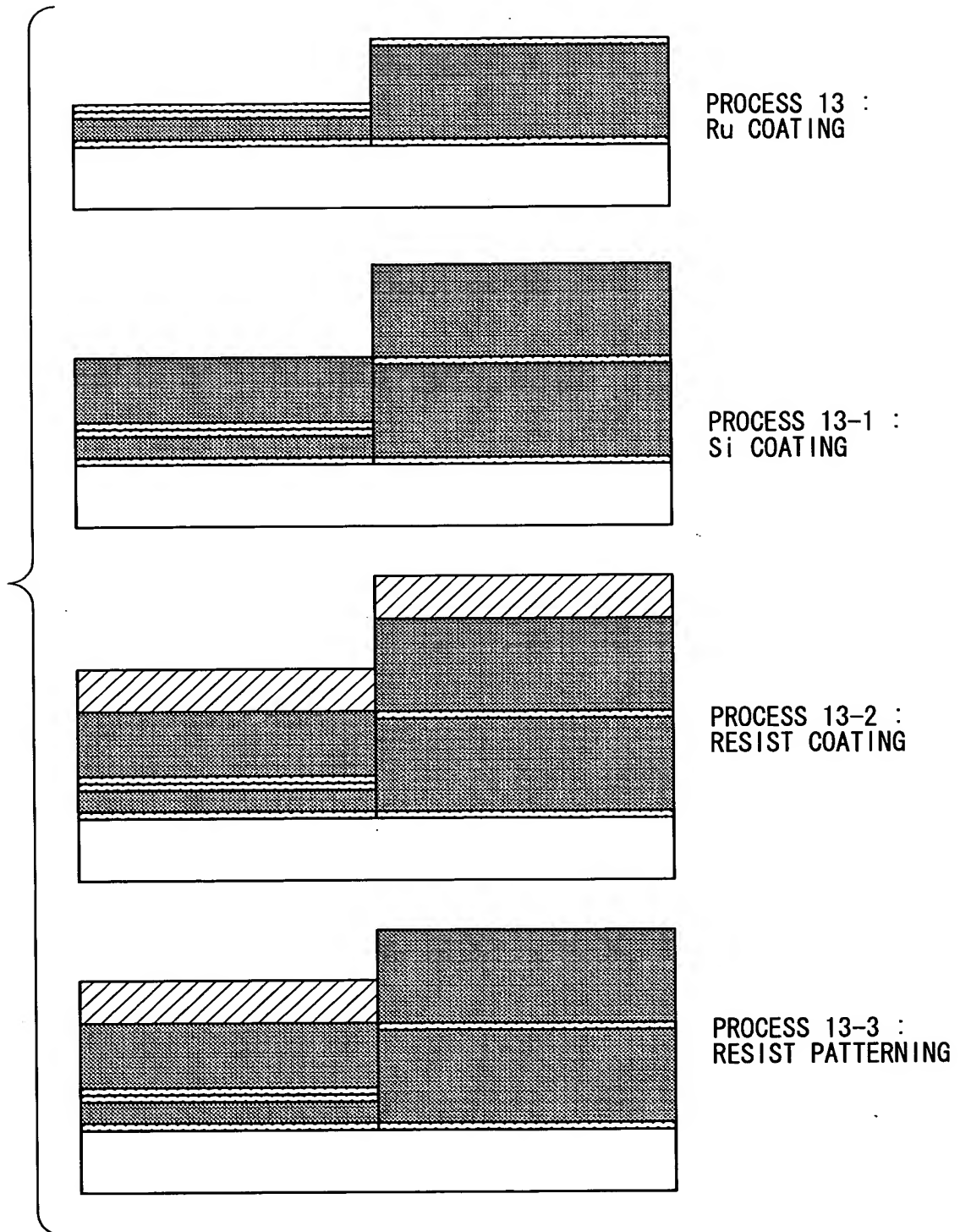
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FIG. 35



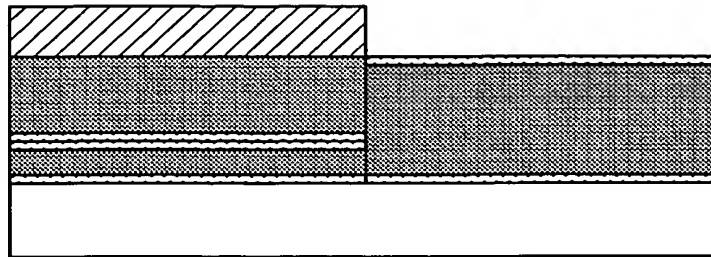
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FIG. 36

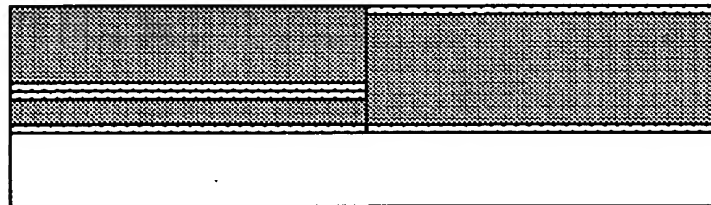


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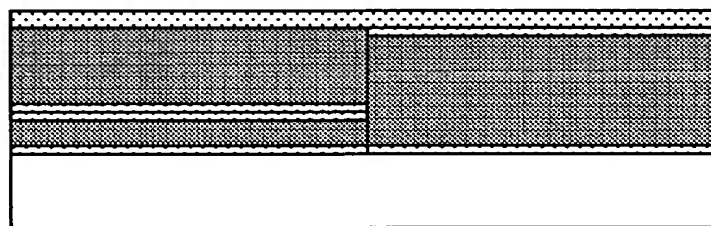
FIG. 37



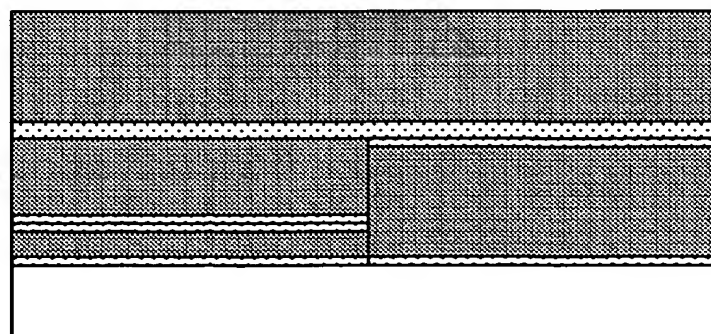
PROCESS 13-4 :
Si ETCHING



PROCESS 13-5 :
RESIST SEPARATION



PROCESS 13-6 :
Ru COATING



PROCESS 14 :
TaN COATING

FIG. 38

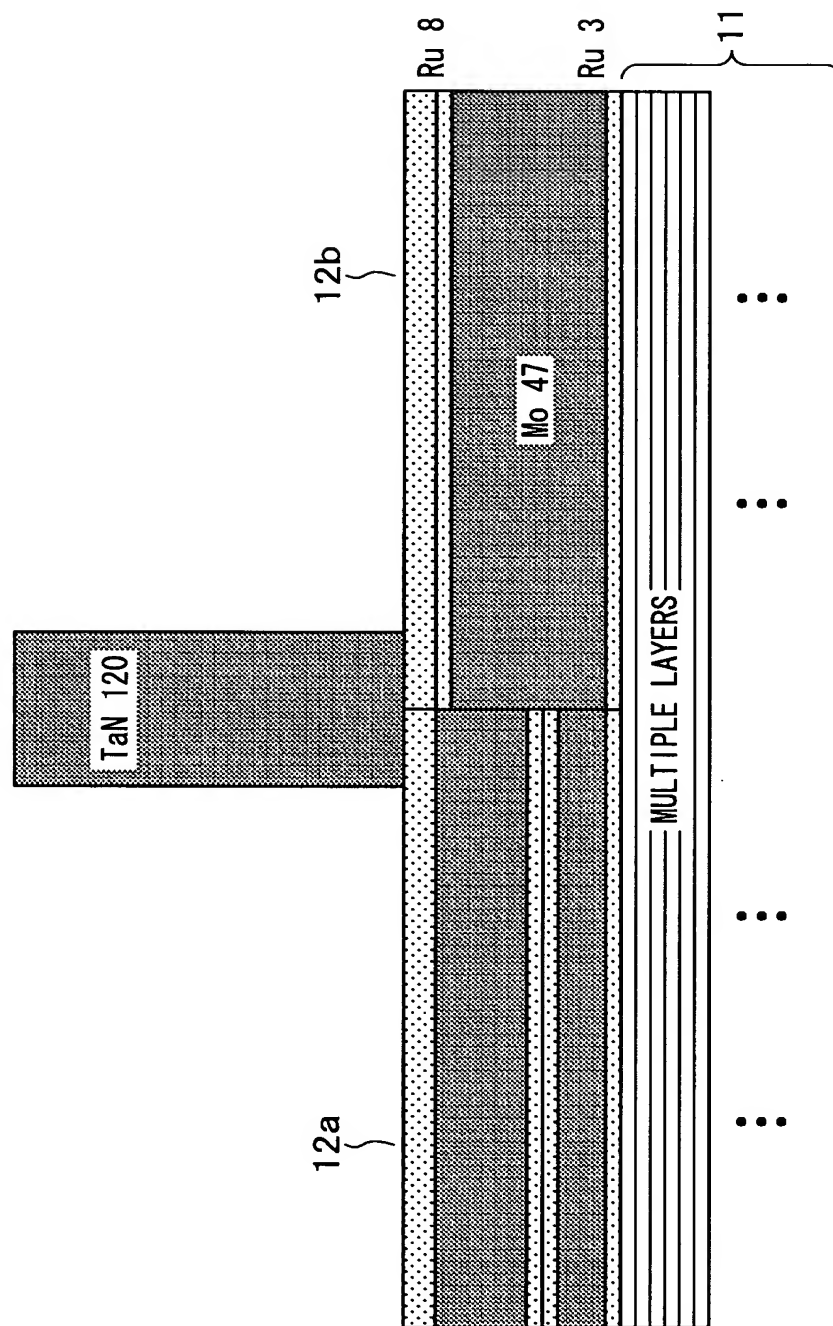
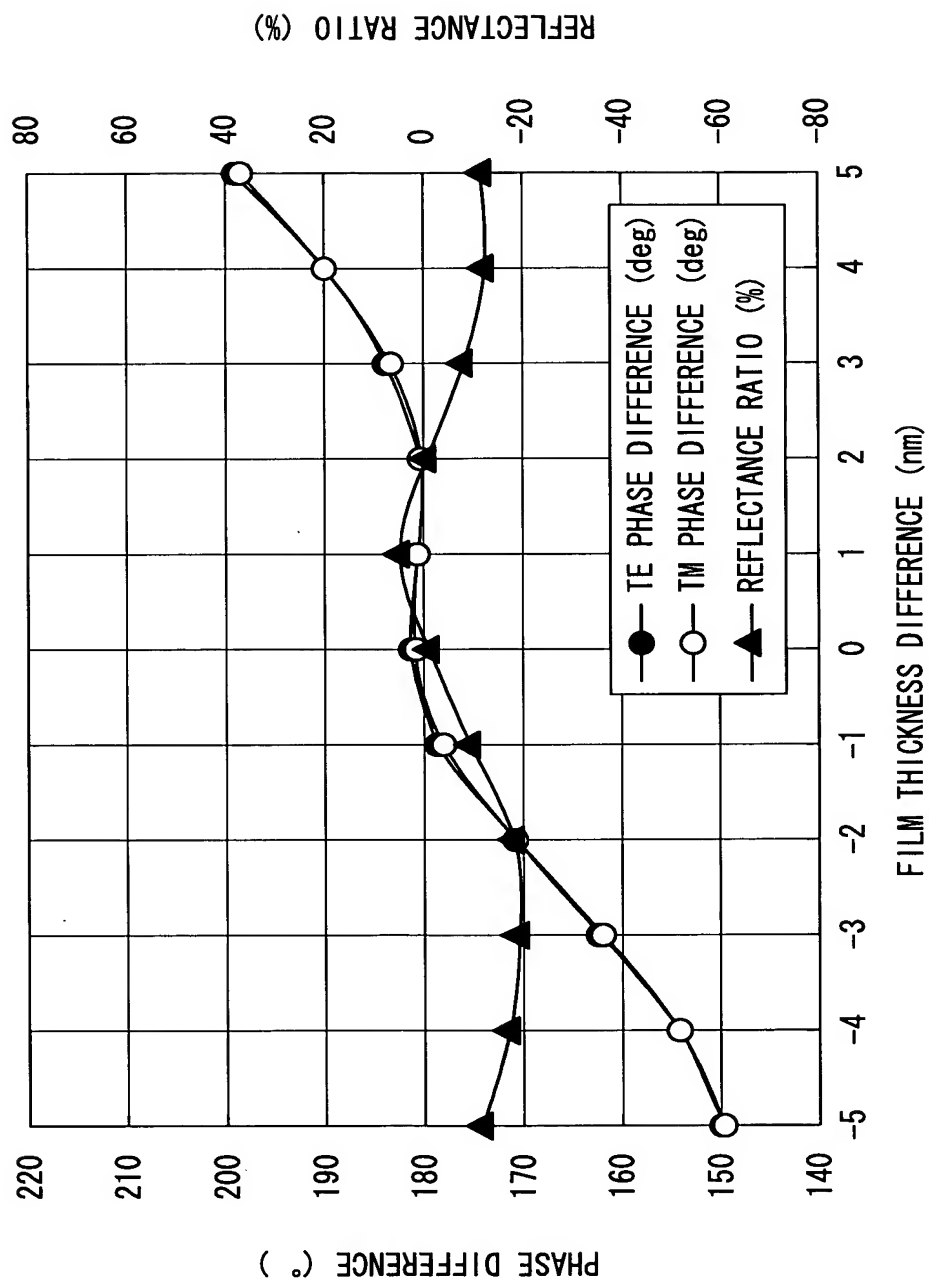


FIG. 39



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FIG. 40

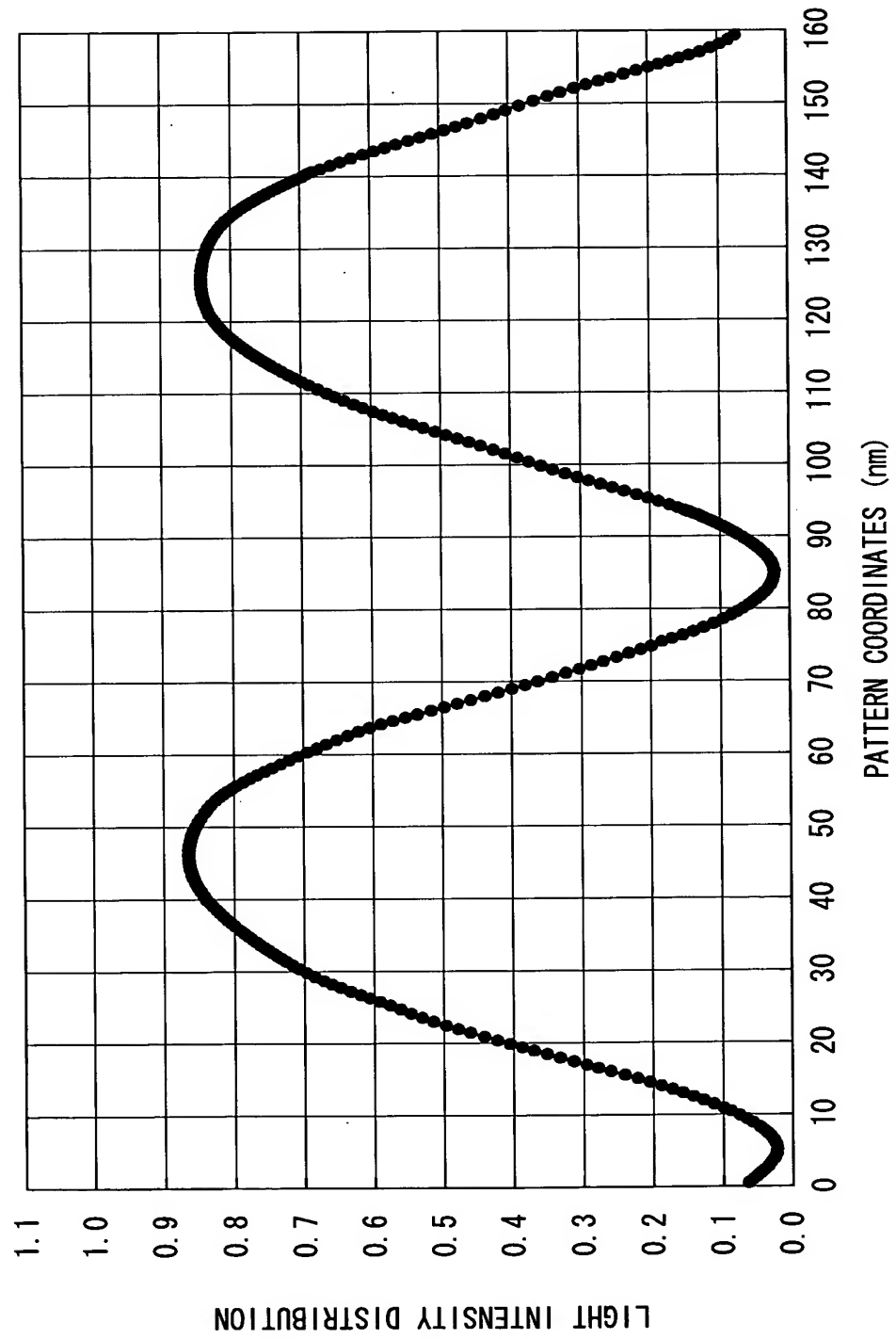


FIG. 41

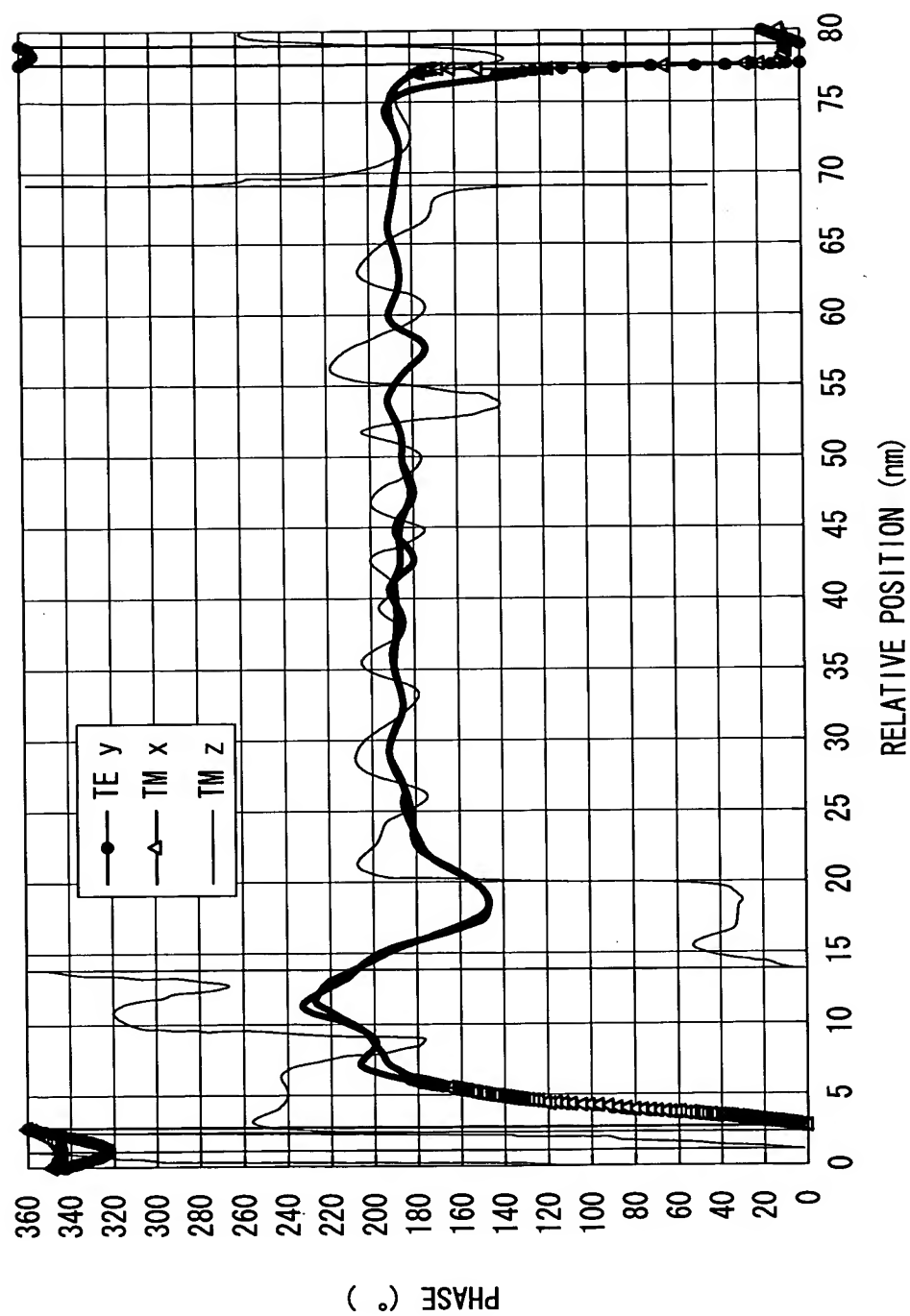
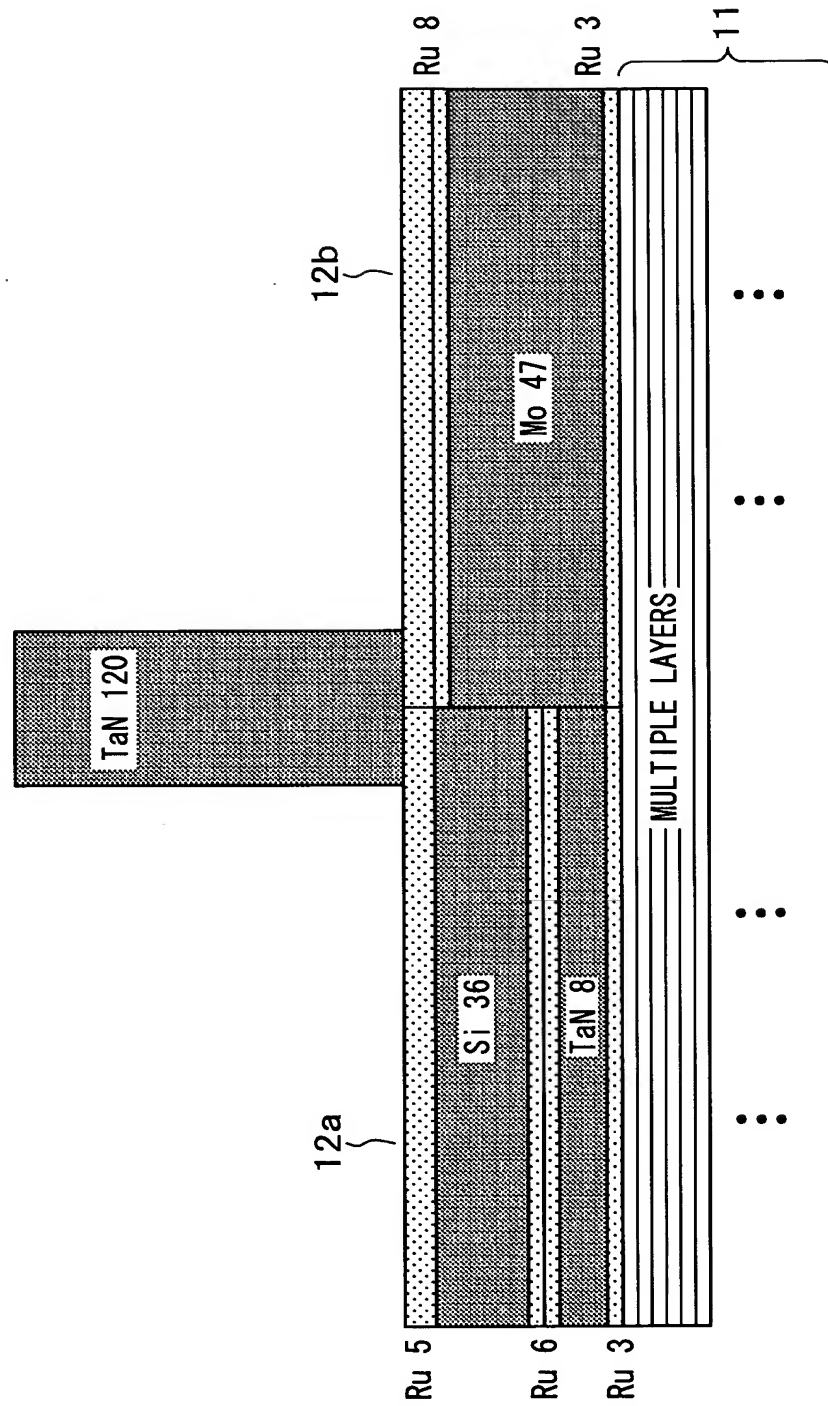
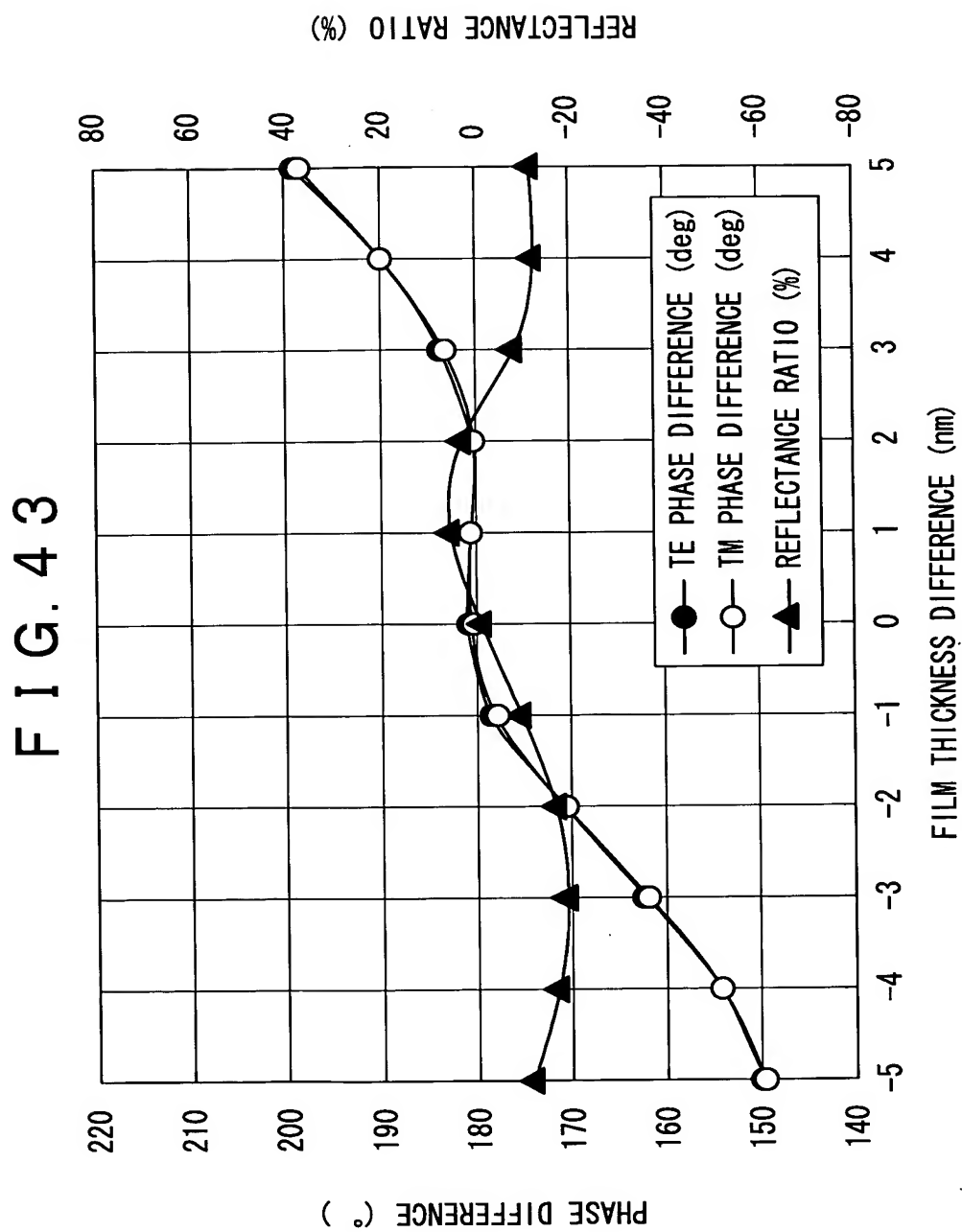


FIG. 42



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FIG. 44

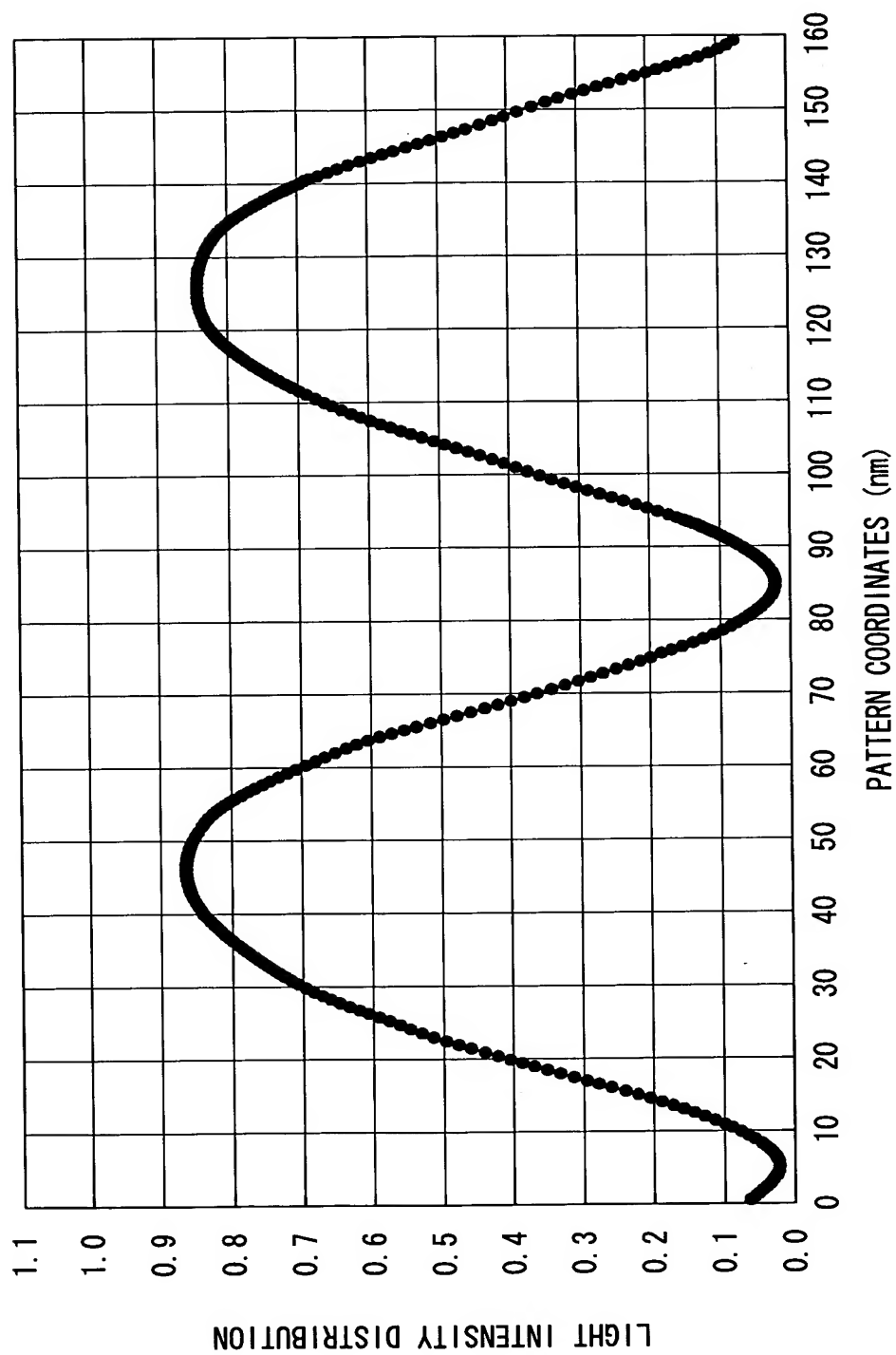


FIG. 45

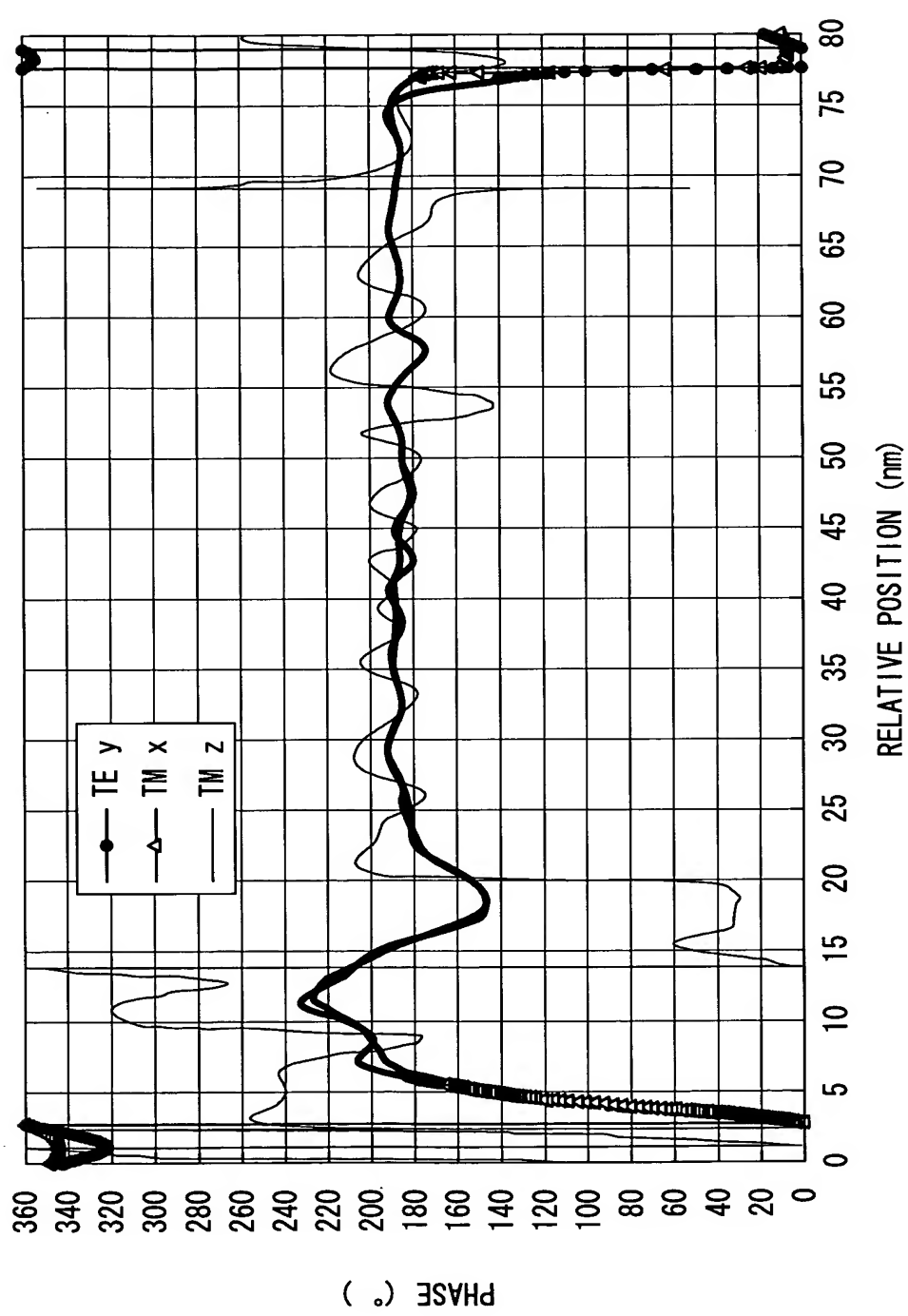


FIG. 46

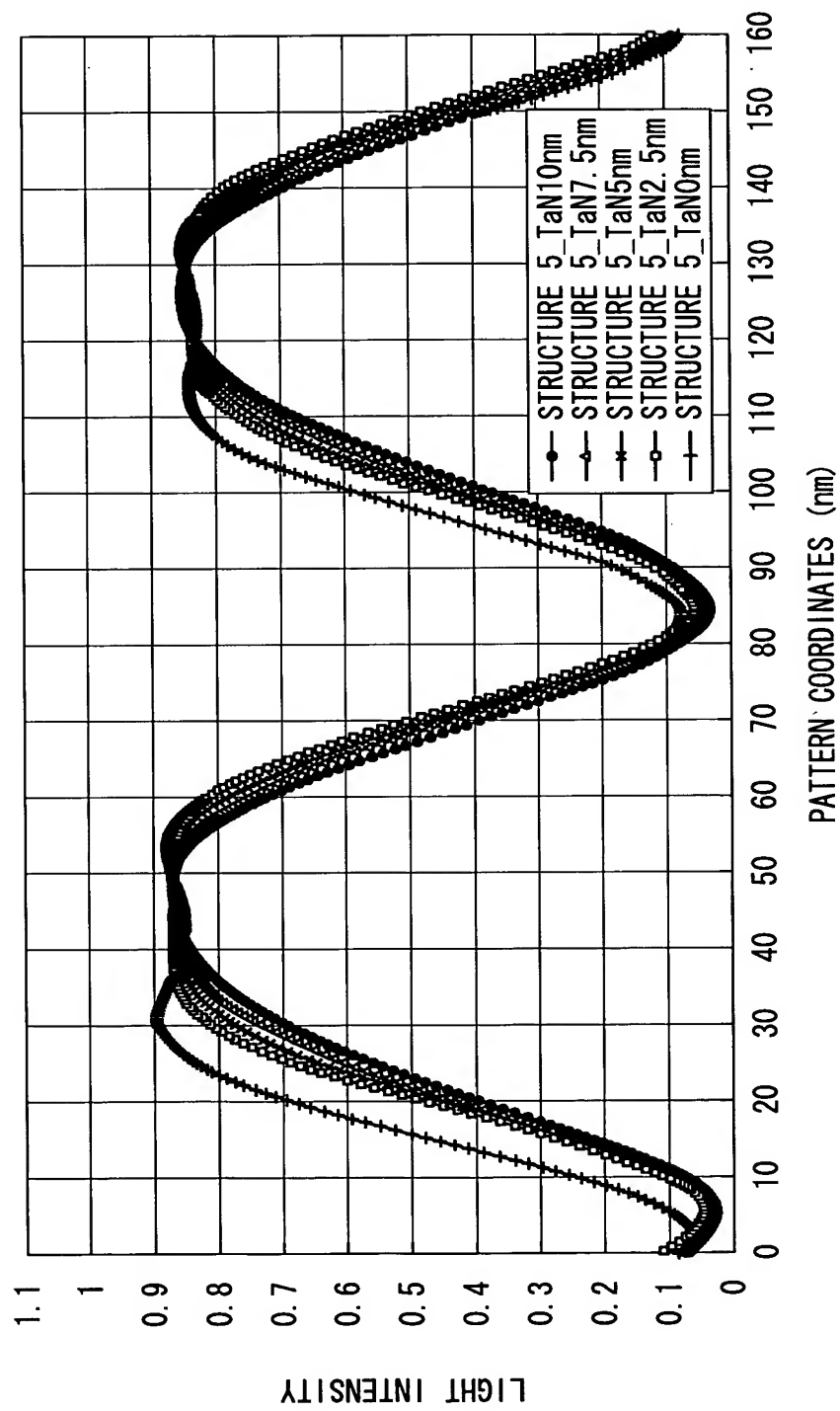
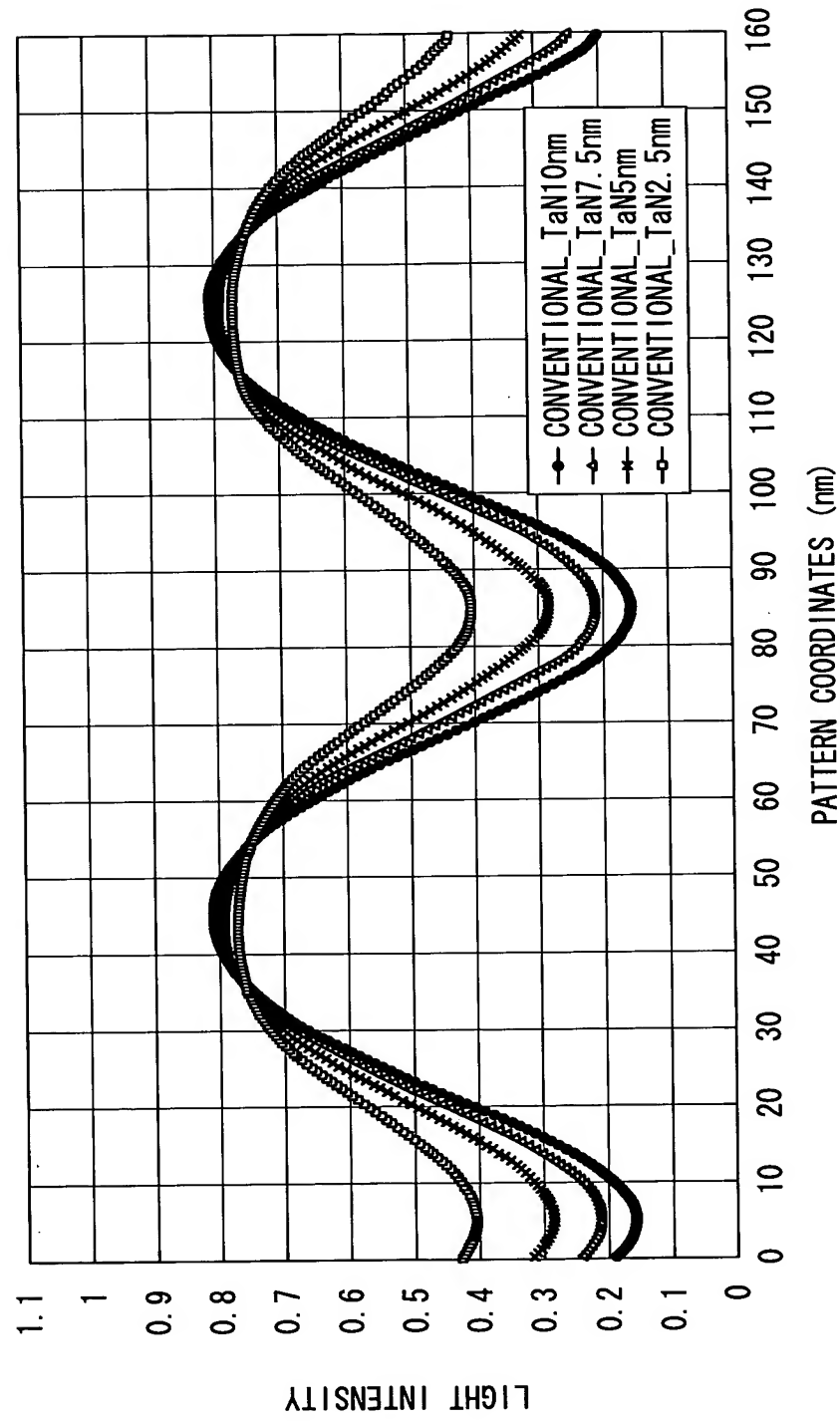


FIG. 47



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FIG. 48

